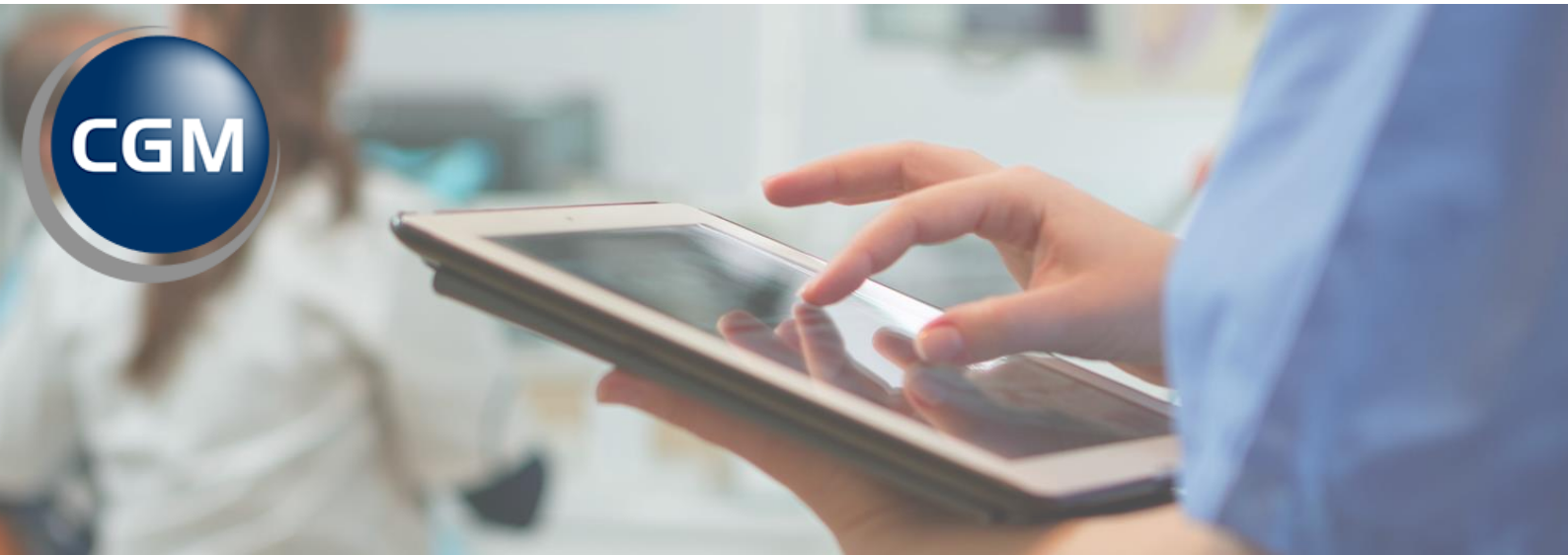


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PRIVATE EQUITY CHALLENGE

CompuGroup Medical SE & Co. KGaA – Private Equity Trends & Leveraged Buyout
Impact

MARLIN EGBUNA

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Abstract

This paper examines the acquisition of CompuGroup Medical SE & Co. KGaA, a German healthcare software IT company. In an investment committee paper, we analyze the target, the healthcare IT market, and how we can create value by acquiring CGM. This paper explains why we want to invest in CGM, how we want to create additional value, and what implications this has both, strategically and financially. The group part of this document comprises an executive summary, while the individual parts contain deep dives on the created value creation strategy, valuation, leveraged buyout impact, due diligence, and exit.

Keywords

Private Equity, Leveraged Buyout, Germany, Healthcare, IT, Software, Investment Thesis, Value Creation, Valuation, Leveraged Buyout, Due Diligence, Exit

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Shared Part

1. Company Selection Decision Process

With the beginning of the PE Challenge in June we started the process of choosing a suitable company, based on the essential qualities that make a company appealing to a PE investor. PE funds look for companies with a robust, lasting competitive edge. Further, they give precedence to companies that have a verified history of profitability and positive cash flows. PE investors seek companies with the potential to enhance operations. This can encompass streamlining processes, cutting expenses, or optimizing management practices. Companies with a scalable business model are also appealing, as they offer major growth prospects. Finally, companies that operate in industries with favorable long-term trends are preferred (Wilson, Amini, and Wright 2021, 5). We decided to choose CompuGroup Medical SE & Co. KGaA (CGM) as it fulfills most of these requirements and for further reasons listed in this paper.

2. Company Overview

2.1 CGM's Key Characteristics

After choosing CGM, we promptly delved into its operations and identified the company's core strengths to produce a concrete overview in the investment committee paper (ICP). CGM specializes in crafting software and IT solutions tailored for the healthcare sector to support various medical and organizational operations across private practices, hospitals, and more. Its business is structured into four key segments: Ambulatory Information Systems (AIS), Hospital Information Systems (HIS), Consumer and Health Management Information Systems (CHS), and Pharmacy Information Systems (PCS). Revenue streams are multifaceted, stemming from software licenses, maintenance, professional services, hardware sales, and advertising. A significant portion of revenue is recurring. CGM is based

in Germany with a presence in 20 countries and employs over 9,200 people. CGM is publicly trading on the Frankfurt Stock Exchange, with its founder, Frank Gotthardt holding a significant share (CGM 2023).

2.2 Business Segments

This chapter lists the different business segments and their key characteristics. An in-depth analysis can be found in the ICP.

AIS specializes in practice management software, providing a solution that encompasses all clinical, administrative, and billing-related functions in doctor's offices. AIS shows a high share of recurring revenues (76.8%) and revenue realization is fast due to short decision-making and sales processes within the customer base (CGM 2023).

The HIS segment focuses on devising and vending clinical and administrative solutions customized for the inpatient industry. The customers encompass acute care hospitals, rehabilitation centers, and diverse healthcare facilities. With 68.5% of recurring revenue, the revenue structure tends to be more project-based, reflecting prolonged decision cycles within the predominantly publicly managed hospital customer base (CGM 2023).

The CHS sector targets doctors, chemists, drug manufacturers, medical insurance providers, other healthcare IT firms, and patients. The range of products includes software interfaces, portals for market data relating to outpatient healthcare, tools for medical decision support, databases for medications, and security solutions for service providers. The segment also features the Telematics Infrastructure (TI) business. Revenue results from cooperation agreements, data collection, and brokerage contracts, and technical support with a recurring revenue share of 32% (CGM 2023).

Pharmacy Information Systems specializes in the creation and sale of administrative and billing software tailored to pharmacies. The software's accompanying services provide

information and decision-making support within the medication supply chain, encompassing procurement, shipping, inventory management, and retail operations. Advanced safety and control features try to guarantee cost-effective dispensation of medical treatment. The share of recurring revenue is 64.3% and the customers feature equal characteristics as in the AIS segment with fast decision-making and short installation periods (CGM 2023, 19-20).

3. Market Overview

The global healthcare IT market is expected to grow significantly until 2030 (Grand View Research 2023). Demographic aging, the increased affordability of medical services, and a corresponding expansion of health insurance coverage all contribute to the overall healthcare market growth expectations. The dominating use of digital technologies is a key factor contributing to explicitly strong growth in the IT healthcare market. On the other hand, rising healthcare facility expenses in developed nations, workforce shortages, and the growing adoption of digital tools pose challenges to the healthcare sector. Furthermore, public funding programs facilitate the adoption and integration of digital tools within the healthcare sector, which has been under-digitized for a long time (Brönneke und Debatin 2022). Currently the cross-border provision of digital health services and goods remains poor, which is why the European Union further facilitates the use of digital products and services in Europe (European Commission Directorate General for Health and Food Safety 2021).

The healthcare IT market is characterized by its ability to generate recurring revenue without heavy asset investment, leading to a highly competitive landscape with considerable merger and acquisition activity. Participants in the market have strategically adapted by either diversifying their offerings or specializing, with a keen focus on consolidating their regional market presence to mitigate the threat of current and emerging competitors. CGM distinguishes itself through a diversification strategy, offering a broad, flexible, and cross-border array of products and services that serve the needs of major healthcare institutions

along the entire patient value chain. The competitive landscape in the healthcare informatics sector can be elegantly divided into distinct categories based on a variety of factors. The first category includes large conglomerates such as Oracle Cerner, GE HealthCare, and Philips Healthcare (Oracle Co 2023, General Electric Co 2023, Koninklijke Philips 2023). In the second category, we find specialized healthcare software companies such as CGM, Nexus AG, and Veradigm. These companies are known for their dedication to healthcare applications (Nexus AG 2023, Veradigm 2022). Finally, the market is complemented by the presence of start-ups. These are niche companies disrupting the healthcare informatics market with new approaches.

The ICP additionally dives deeper into the market for each of CGM's business segments. The market for AIS, is characterized by a strong growth outlook into 2030 with an annual increase in the addressable market of 9.72% (Grand View Research 2023). In Germany, CGM holds 27% of the market share (BNP Paribas, 2023). CGM's competitive advantages in this market include comprehensive software offering as well as a cross- and upselling potential resulting from CGM's large and diverse customer base.

The HIS market addresses the administrative, financial, and clinical aspects of hospital operations. The growing demand for reduced healthcare costs are boosting the demand for HIS in developed and emerging economies. Additionally, the overall rising penetration of technologically advanced solutions and system upgrading needs coupled with governmental initiatives fuels HIS market growth. An annual growth rate of 17.4% is expected until 2030 (Grand View Research 2022). CGM's market share in Germany is at 18% (BNP Paribas Exane 2022).

The PCS segment addresses pharmacists to streamline and optimize their workflows. The addressable market is expected to grow by 9.4% per annum until 2032 (Precedence Research 2023). CGM serves over 4,000 pharmacies and has a market share of ~20.0% in Germany

(CGM 2023).

The CHS market targets healthcare providers as well as patients and consumers. It is driven by increasing customerization and customization and can be categorized into two segments: telehealth services, providing online health advice, and healthcare data analytics. Both are expected to grow by double digits (19.7% and 23.1%) annually (Fortune Business Insights 2023, Verified Market Research 2023). The telematics infrastructure, Germany's healthcare digital hub for secure data exchange which is expected to boost this sector's growth also falls into this market (Gematik GmbH 2020). CGM through its fully accredited software portfolio and as the main connector, already provided c. 110k health institutions with TI modules (CGM 2023).

4. Historical Financial Analysis

Overall revenues have grown by a four-year compound annual growth rate (CAGR) of 15.0% since 2019 with 64.6% of recurring revenue in 2022. The inorganic growth has exceeded organic growth due to CGM's mergers & acquisition (M&A) strategy. Software licenses contributed modestly to revenue growth with a CAGR of 11.3% from 2018 to 2022 and their overall revenue share remained relatively low, exceeding just 10.0%. Its significant growth of 49.5% from 2020 to 2021, was predominantly attributed to M&A, particularly the acquisition of eMDs Inc. A critical driver of revenue over the last five years has been software maintenance and other recurring revenues, with a CAGR of 15.2%. This segment's revenue share notably increased from 57.8% to 64.6%, fostered by growth in AIS and HIS. The HIS segment, in particular, demonstrated robust growth with a CAGR of 33.7% from 2019 to 2022, significantly influenced by M&A activities, including the acquisition of Cerner Corporation's IT healthcare portfolio. Hardware sales are primarily driven by the TI business which is part of the CHS segment, and the PCS segment. With the roll-out of the TI in 2018, hardware sales increased by 176.6% YoY to €112.1m – since then, they have remained

almost stable, apart from a one-off drop in 2019 due to declining hardware sales in telematics implementation. Advertising, eDetailing, and data revenues account for 98.3% in 2022 in the CHS segment. CGM's acquisitions, including among others INSIGHT Health Group, bolstered its position in data-driven solutions, leading to a 62.5% increase in year-over-year revenues (CGM 2019; CGM 2020; CGM 2021; CGM 2022).

Given the M&A strategy and significant investments in recent years, personnel and other operating expenses in particular rose sharply, which has put pressure on the EBITDA margin, falling by 7.0 percentage points since 2018. However, personnel expenses are slowly normalizing as the company has now hired enough personnel for further growth. The main goal after acquiring CGM is to rebuild the earnings before interest, depreciation & amortization (EBITDA) margin to match the 26.2% CGM reached in 2018 (CGM 2019).

For the ratio analysis, the ICP compares CGM with three of its competitors, namely Cegedim, Nexus AG, and Equasens. Three ratios are examined, specifically, Return on Assets (RoA), Return on Capital Employed (ROCE), and several liquidity ratios such as cash, quick and current ratios. For an in-depth analysis, this paper refers to the ICP.

5. Valuation

The valuation of CGM establishes a benchmark for its potential value creation and helps in negotiating the purchase price. The applied valuation methods include a comparable company analysis (CCA), a comparable transaction analysis (CTA), and a discounted cash flow (DCF) valuation. For the CCA we have identified 13 comparable companies. We calculated the EBITDA and sales multiples using financial data from the past five years. This generated a median sales multiple of 2.9x and a median EBITDA multiple of 11.9x (2022). For the CTA, in total 14 comparable transactions in the healthcare IT sector in recent years were scanned, including the takeover of Cerner by Oracle and the acquisition of eMDs by

CGM (eMDs 2020, Oracle 2021). The CTA results in median multiples of 2.7x (sales) and 17.1x (EBITDA). Lastly, for the DCF, the future cash flows and the cost of capital were determined. With a weighted average cost of capital of 8.4% the implied EBITDA multiple based on the DCF is at 12.9x and 2.6x for the sales.

An EBITDA multiple of 12.9x was chosen based on the three most comparable companies Nexus AG, Equasens, and Cegedim in combination with the DCF implied multiple resulting in an EV of EUR 2,785m,

6. The leveraged buyout of CGM

Leveraged buyouts (LBO) involve the acquisition of companies through significant debt financing with the assets of the acquired company serving as collateral for the loans. An LBO is the common form of transaction in PE.

An LBO requires the creation of an operating model. The operating model plays an essential role in detailing how the acquired company will perform after the acquisition to achieve the desired financial outcomes. It serves as a blueprint for the company's operations, outlining the strategic initiatives, cost structures, revenue streams, and business processes that will be implemented or optimized to drive efficiency and profitability. For the acquisition of CGM, we have split up the top-line projections into growth rates per segment. Expense items were projected as a percentage of sales and are expected to slow down. This leads to a 1% gross profit margin improvement throughout the holding period due to several operational improvements we expect CGM to make. After determining the amount of leverage, the repayment schedule resulting from it, and the exit from the investment in 2028, the LBO determines the returns for each group of investors and lenders.

7. Investment Thesis

Below is an excerpt from our analysis of the rationale for investing in CGM identifying

specific market opportunities and trends on which CGM could capitalize. CGM is an international, market-leading, healthcare industry-digitizing company. The digitalization of workflows, supported by software firms such as CGM will act as a crucial catalyst for future profitability (Ostern et al. 2021). Further, we believe CGM's diversified, scalable, and sticky customer base to be a major plus for an investment. Customers benefit from its comprehensive product portfolio, which delivers solutions throughout the patient journey. The company's strategy to utilize and expand its new modular product portfolio, featuring several customizable add-ons, not only enhances valuable cross- and upselling potential but also increases switching costs, thereby providing more tailored solutions to its customers. Among further reasons for the acquisition of CGM, the recurring, high-quality, and macro-resistant nature of CGM's revenues is a main argument for the firm. CGM has achieved a 10.0% increase in its recurring revenue, currently at 65.0%, and we aim to raise it further to 69% by our exit in 2028. Additionally, digitization funding programs will further advance top-line growth whilst demand from healthcare institutions also thrives, thus driving revenue growth. To summarize, one can say that CGM's evolving product portfolio and continuous M&A activity solidified its position as a leading player in the medical software industry and made it highly interesting for an acquisition.

When focusing on the future strategy with CGM, we implement a three-step plan to unlock sustainable growth. Firstly, we will improve CGM's bottom line by reducing its personnel to 42.2% of revenues which results in cost savings at exit of EUR 410m and strengthen its margin. Secondly, CGM's top line will increase by inorganic growth through M&A and organic growth through an in-depth focus on the AIS and CHS segments. CGM's strong track record makes us certain, that CGM already has an exceptional ability to acquire and integrate small and large companies (Mergermarket 2023). We identified CareCloud as a fitting target. Both growth strategies will result in an increase in the multiple of invested

capital (MOIC) of 0.3x. Lastly, through operational support, we want to transform CGM further into a recurring revenue business with an increase in recurring revenues to 69.4% at exit.

8. Exit Options and Target Buyers

As PE firms aim to divest their stakes in portfolio companies after a certain period of time, identifying suitable buyers becomes a strategic imperative. For that reason, we included a part about potential exit opportunities in our ICP, outlining three potential buyer groups: strategic buyers, a secondary buyout, or an initial public offering (IPO). A strategic buyer is a company that purchases another firm as a component of its long-term business plan to augment its own operations, market position, or capabilities. A secondary buyout is the sale of a private equity firm's equity stake in a company to another private equity firm, as opposed to a strategic buyer or a public offering. Lastly, we also see the opportunity to go public with CGM.

9. Conclusion

After considering all parts of the ICP, the acquisition of CGM represents a great strategic opportunity to add a business with strong growth expectations in an underdeveloped market to the funds' portfolio. This investment conforms to high growth objectives, assuring considerable returns and synergies. With an MOIC of 3.5x and an IRR of 22.9%, we expect to achieve returns above average on the acquisition of CGM. We recommend pursuing the acquisition, envisaging noteworthy long-term value generation for all parties involved.

Individual Part Justus Ferdinand Schroeder: Valuation

1. Introduction

In the realm of mergers and acquisitions, the valuation of a company is acknowledged as an integral component in the decision-making process when pursuing an investment opportunity. The valuation process is vital to help investors determine the fair value of an asset, assess the risks associated with an investment and evaluate its potential returns.

This paper serves to extend the analysis presented in the Investment Committee Paper (ICP) and focuses on the valuation of CompuGroup Medical SE & Co. KGaA (CGM). It offers a delineation of the factors that influenced the determination of the valuation of the company and endeavors to elucidate the underlying fundamental theories. The emphasis is on the absolute and comparative valuation methodologies applied in the valuation process – namely Discounted Cash Flow (DCF), Comparable Company Analysis (CCA) and Comparable Transaction Analysis (CTA). Due to the limited scope, the valuation based on the LBO model is not discussed within this paper.

2. Valuation Fundamentals in M&A

Company valuation in the wake of a M&A transaction is not a static or uniform measure, but a complex process influenced by various factors, often resulting in different perceived values for the same target by different stakeholders. The valuation primarily serves as a strategic guide in negotiations, providing a basis for decision making, pricing strategies and negotiation tactics. It involves both quantitative aspects, such as financial performance and the value of assets, and qualitative aspects, such as market position and growth potential (Aluku and Amidu 2005).

The perception of the value of a company is influenced by factors like strategic fit, potential for synergy realization, and the buyer's ability to enhance the target's performance, and can therefore vary between the interested parties. For instance, a company might be valued higher by a buyer who can achieve substantial cost savings or revenue synergies post-acquisition compared to a

buyer looking merely for portfolio diversification. Similarly, the value perception often differs between the buyer and the seller, primarily due to their respective motivations and expectations. Sellers might value their company higher, factoring in emotional attachment or future growth prospects, while buyers might be more conservative, focusing on the current performance and risks attached to the asset after the acquisition (Aluku and Amidu 2005).

Moreover, valuation is used in M&A not only to determine the price of the company, but also for various strategic purposes. The valuation process can help to identify potential opportunities and risks, assess the feasibility of the transaction, and help in the planning of post-merger integration by highlighting areas for financial and operational synergies. Generally speaking, valuation is a multi-layered process that encompasses a number of objective and subjective considerations making it an indispensable element of any M&A transaction (Grant 1988).

2.1. Valuation Methodologies

For the valuation of CGM, we employed the three most widely recognized and established valuation methodologies that form the cornerstone of the valuation of a company on a standalone basis, namely Comparable Company Analysis (CCA), Comparable Transaction Analysis (CTA), and Discounted Cash Flow (DCF). The following chapter provides the theoretical foundations and a brief overview on the approach of each valuation methodology.

Comparable Company Analysis

The CCA is based on the principle of arbitrage, which posits that all substitutes on the market should be sold for the same price (Gerke and Bank 2003). Therefore, the value of a company (“target”) is based on the valuation of similar companies in the same industry (Meitner 2006). The underlying premise is that these similar companies represent highly relevant reference point for valuing a certain target as they share key business and financial characteristics, performance metrics, and associated risks (Rosenbaum and Pearl 2020).

In essence, the CCA is characterized by the reliance on a peer group of publicly traded comparable companies. In order to identify companies with similar business and financial characteristics (e.g., sector, customers, profitability), it is important to truly understand the target. For each of the comparable companies the value – based on the Equity Value or the Enterprise Value – is expressed as a multiple of a certain financial basis of reference (e.g., Sales, EBIT). In the second step, the derived multiple is applied on the respective basis of reference of the target company in order to determine the implied valuation range (Meitner 2006).

Comparable Transaction Analysis

The CTA, like CCA, represents a comparative valuation method that employs a multiple-based approach. The multiples are derived from what was paid for similar companies in prior M&A transactions – similar to the CCA, the foundation is the selection of appropriate comparables. The most suitable comparable transactions typically involve a target that, like in the CCA, shares key business and financial characteristics with the company being valued. Generally speaking, the most recent transactions are the most relevant. However, in some cases, older transactions may be considered as well if they took place under market conditions similar to those of the current transaction (Rosenbaum and Pearl 2020).

Under normal market conditions, the CTA tends to provide a higher multiple range than the CCA, which is primarily driven by two factors (Rosenbaum and Pearl 2020). First, buyers generally pay a "control premium" for the right to control decisions about the target and its cash flows. Further, strategic buyers often have the opportunity to realize synergies, which underpins their ability to offer a higher purchase price. Synergies refer in particular to expected economies of scale, the increase in market power and internal governance benefits (Martin and Eisenhardt 2017).

Discounted Cash Flow

The Discounted Cash Flow (DCF) method is based on the principle that the intrinsic value of an asset is fundamentally the sum of cash flows it is expected to generate over its lifespan, discounted to its present value (Steiger 2008). This method is based on the theory of the time value of money, meaning that the nominal value is dependent on the rate with which it earns interest. (Weil 1990)

The DCF methodology focuses on the projection of future cash flows, which typically involves a comprehensive analysis of the historical performance of the asset, market conditions and growth prospects. Based on this historical analysis and expectations of future performance, a growth rate is determined and applied on the to the individual positions that form the cash flow. Within the DCF method, a distinction is made between four different forms, which differ in particular in terms of the cash flows to be discounted and the respective discount rate – namely the Adjusted Present Value (APV), Capital Cash Flows (CCF), Free Cash Flow to Equity (FCFE) and Free Cash Flow to the Firm (FCFF) (Oded and Michel 2007). The arguably most well-known and used free cash flow (FCF), a financial performance indicator that represents the amount of cash a company generates after considering the cash outflows required to maintain or expand its asset base (Yaari et al. 2016). In essence, it is the cash generated by a company available for distribution to the holders of the company's securities (i.e., shareholders), holders of debt securities and holders of preference shares. The FCF can be calculated in several ways: One way is to start with net operating profit after tax (NOPAT), which equals earnings before interest and tax (EBIT) after deducting tax. By adding non-cash expenses such as depreciation and amortization and deducting investments and the increase in net working capital, the FCF is derived, in theory. The FCF is then discounted at a rate that reflects the opportunity cost of capital, typically using the weighted average cost of capital (WACC). The WACC is derived from the after-tax cost of debt and cost of equity, each weighted by the ratio of debt respectively equity to total assets, and reflects the average rate a company expects to pay to finance its business (Oded and Michel 2007).

In general, there are two phases in the DCF valuation. The detailed forecast period (usually five to ten years), in which the FCF is calculated for each year, and the period after the forecast. Instead of forecasting a large number of periods in detail, the last FCF of the forecasted period is used to calculate the Terminal Value (TV) by applying an estimated perpetuity growth rate to the FCF and discounting it using the WACC. The sum of the future FCFs within the forecasted period and the TV equals the value of the company (Kruschwitz and Loeffler 2006).

2.2. Definition of CGM's Industry Sector

In the ICP, we have segmented and analyzed the market relevant to CGM based on the business segments in the Annual Report: Ambulatory Information Systems (AIS), Hospital Information Systems (HIS), Pharmacy Information Systems (PCS), and Consumer and Health Management Information Systems (CHS). However, in order to gain a comprehensive understanding of the relevant market and ultimately identify suitable companies for the comparative valuation methods, we initially defined the market according to the various target groups and application areas.

CGM operates in the global Healthcare Information Technology (HCIT) market. This market, broadly speaking, encompasses the integration of healthcare and technology, focusing on the development and application of various Information Technology (IT) systems and software to improve healthcare delivery and management. It's a dynamic field that is constantly evolving and can be divided into three subsegments based on the customers: Supplier IT, Provider IT, Consumers.

Supplier IT

In the Supplier IT subsegment, companies offer specialized IT solutions for pharmaceutical and medical technology (MedTech) companies. This subsegment can be further divided by three key stages of the drug commercialization process, which include the *Discovery and Research* (e.g., AI-based drug discovery), *Development* (e.g., clinical trial solutions), and *Commercialization* (e.g., medical regulatory and medical affairs) of pharmaceutical products (Burke 2023).

Provider IT

The Provider IT subsegment is concentrated on solutions for systems, practices, and healthcare professionals. The solutions offered are designed to assist in all medical and organizational activities of healthcare facilities. A major segment within Provider IT is *Electronic Health Records* (EHR), which includes solutions for incorporating patient observations and documentation, e-prescriptions, and medicines management. The EHR solutions often integrate closely with the *Care Pathways* solutions, which focus on software aimed at integrating the management of end-to-end patient journeys and care outcomes across various providers and systems. Additional segments for Provider IT include *MedTech* (i.e., specialized software for specific use cases such as the management of medical images), *Finance and HR* (e.g., shift scheduling), *Logistics* (e.g., inventory management), *BI* (i.e., data analytics) as well as *Telehealth* (i.e., remote healthcare services) (CGM 2023).

Patients/Consumers

The HCIT sector also encompasses companies that specialize in Business-to-Consumer (B2C) solutions, directly targeting patients and consumers. These offerings can be categorized into various segments, including *Wearables* (e.g., smart bracelets for health data tracking), *Education* (e.g., self-taught learning platforms), *Provider Search* (e.g., healthcare provider comparison platforms), and *Disease Management* (e.g., apps to manage chronic illness). In each category technology is being leveraged to enhance the individual health management.

3. Valuation of CGM

The following chapter dives into the application of the CCA, CTA and DCF methods to determine an indicative valuation of CGM. It not only explains the valuation process as a whole as well as its individual components, but also critically examines the specific challenges and limitations of the individual valuation methods.

3.1. Comparable Company Analysis

Determination of Relevant Comparable Companies

As defined in Chapter 2.1 (CCA), the first step is to understand the company to be valued and to identify the relevant market. Within the HCIT market, CGM focuses on *Provider IT* (see chapter 2.2) for the AIS, HIS, CHS and PCS markets defined in the Annual Report. As part of the market analysis in the ICP, a selection of competitors within the HCIT market with a certain size (in terms of annual revenues) and geographical presence have already been identified (e.g. Nexus, Oracle Cerner, GE Healthcare and Philips Healthcare). In order to provide the most appropriate valuation, individual application areas were defined within the Provider IT segment (see chapter 2.2) and comparable companies were identified according to CGM's product offering. Here, the focus was on companies providing solutions for *EHR/ Care Pathways*, *ERP Finance & HR* and *Telehealth*. While EHR and Care Pathways are two different subsegments, companies usually offer solutions for both application areas. While EHR software is used to building a digital platform centralizing and managing patient information (Dinh-Le et al. 2019), solutions for Care Pathways focus on supporting in the implementation and management of standardized treatment protocols as well as collecting and analyzing data to provide insights for continuous pathway improvement (Pinder et al. 2005). Especially EHR solutions form the core of CGM's product offering, from which the company has expanded into other application areas over the years. However, in order to reflect the entire solution range from CGM in the valuation to the largest possible extent, further application areas were combined in two additional "buckets" – one for ERP Finance & HR and another one with focus on solutions for Telehealth and MedTech.

Based on the selected product categories within the Provider IT segment, more than 30 companies have been identified, of which only 13 were included given the consideration of additional factors such as geographic footprint, available financial information, size (in terms of revenues), profitability and implied valuation multiples.

For the EHR/ Care Pathways solutions, we identified four relevant companies that form the first of the three “buckets” – namely the German company Nexus, the two French companies Cegedim and Equasens as well as the US-based company CPSI. The second bucket, ERP Finance & HR, mainly comprises US-based companies due to the limited availability of appropriate companies – namely Apollo Medical Holdings, Craneware, Healthstream, R1 RCM and the Italian company GPI Group were selected as comparable companies. Within the third bucket companies with focus on solutions for Telehealth and for MedTech were considered – these include GoodRx, Omda, RaySearch and Terveystalo. While Terveystalo and GoodRx both focus on solutions for Consumer/ Patients within the Telehealth segment, they are a good fit as CGM covers this specific segment with its recent acquisitions m.Doc and ClickDoc. Omda and RaySearch, on the other hand, focus on solutions in the MedTech segment – while Omda offers solutions for medication decisions, which is included in "Pharmastore" and "Multipharmacy" offered by CGM, RaySearch provides software for radiation therapy (comparable to CGM's “DICOM Viewer” for diagnostic imaging).

As already mentioned, a large number of companies were not included in the analysis due to certain characteristics. Although all of the companies are operating in the same market, it is important to note that this fact does not automatically qualifies them as comparable companies. Companies like Oracle and Philips Healthcare may also offer EHR solutions, but while Philips Healthcare also produces consumer electronic products, Oracle mainly develops software solutions for other application areas. Another reason for their exclusion was the size, given that both companies are exceeding CGM's revenues by more than USD 15 billion (Philips 2023, Oracle 2023). However, most of the companies were excluded due to their low or non-existing profitability – this mainly includes US companies that focus on Telehealth solutions such as Teladoc, LifeMD, LifeStance Health Group and Hims & Hers Health. The profitability of these companies makes it difficult to compare them to CGM and hard/ impossible to calculate meaningful multiples.

Determination of Relevant Comparable Ratios

As profitability fluctuates considerably in some peer groups, the EV/Sales multiple was used in addition to the EV/EBITDA multiple. As the EBIT margin is partially even more volatile than the EBITDA margins and the selection of comparable companies is relatively limited, the EV/EBIT multiple was calculated for the individual companies but not included in the valuation. Due to the limited access to reliable expected financial figures for the next twelve months (NTM), the focus was on the current financials of the last financial year (2022) and the last twelve months (LTM).

Calculation of Comparable Ratios

In order to calculate the multiples, the relevant financial data was gathered from Capital IQ and from the respective annual and quarterly financial statements of the companies. The calculation of the equity value (share price multiplied by the number of shares outstanding) was based on the closing prices on December 1, 2023. After calculating the respective net debt, taking into account a like-for-like comparison, and adding it to the equity value, the EV/Sales, EV/EBITDA, EV/EBITA and EV/EBIT multiples have been calculated for the last five financial years and LTM. In order to be able to determine a more meaningful evaluation negative multiples as well as EV/EBITDA multiples above 40.0x, EV/EBITA multiples above 50.0x and EV/EBIT multiples above 70.0x have been excluded from the calculation of the 25th and 75th percentile, median and average. The calculated multiples for EHR/ Care Pathways, ERP Finance & HR and Telehealth/ MedTech are quite similar: the implied median EV/Sales LTM multiples are 2.5x, 2.5x and 3.1x, and the median EV/EBITDA LTM multiples are 11.5x, 12.6x and 10.4x, respectively, resulting in an total EV/Sales LTM median of 2.7x and an EV/EBITDA LTM median of 12.1x.

Further considerations

In order to reflect the business activities/solutions of CGM in the evaluation in the most appropriate way, a mix of companies with specialized solutions for various application areas has been used.

However, in order to obtain an even more accurate indicative valuation, it would have been useful to weight each peer group according to the exact revenue split of CGM in relation to the application area of its software solutions as well as the geographical footprint. Due to the limited data, this was unfortunately not possible within our analysis. Further, it is also worth noting that most of the competitors in Europe in particular are not listed on the stock exchange, which means that many comparable companies could not be taken into account given the nature of the CCA. Besides the weight and availability of comparable companies, the valuation based on the EV/EBIT multiple would have been advantageous for a more accurate indicative valuation, as the EBITDA of CGM includes a significant proportion of D&A due to its growth strategy in recent years.

General Shortcomings of CCA (non-exhaustive)

The CCA methodology has some shortcomings that can lead to a misvaluation, especially for the valuation of technology companies. In general, the analysis can be influenced by short-term market fluctuations, which may not correspond to a company's intrinsic value. Despite that, the CCA often fails to account for unique attributes of the company being valued, such as proprietary technology and the resulting high portion of intangible assets, the degree of technological innovation, or the position within the market. Accurately assessing the value of non-physical assets such as talent and R&D knowledge not being reflected in financial statements presents another significant challenge for the valuation of technology companies like CGM (Sun 2021). Further, there is often a lack of comparable companies, as was the case with the valuation of CGM (e.g. especially young companies often show relatively high growth rates often combined with a low to non-existent profitability).

3.2. Comparable Transaction Analysis

Determination of Relevant Precedent Transactions

Similar to the CCA, the foundation of the CTA is the selection of transactions that are comparable to an acquisition of CGM. The approach to identify suitable transactions was split into two parts.

First, the acquisitions of CGM from previous years were analyzed to find transactions of a similar size to the proposed acquisition of CGM. More than 12 M&A transactions that took place in the past five years were identified, two of which were examined in more detail. These include the acquisition of eMDs by CGM at an EV of EUR 202m (EV/EBITDA of 16.9x) and the acquisition of Cerner's European IT Healthcare business at an EV of EUR 225m (EV/EBITDA of 19.4x). While the IT Healthcare business of Cerner offered solutions for all four business segments of CGM, the focus of eMDs was on practice management solutions (PCS). Although the transactions were only completed in 2020, it is important to recognize that market conditions were generally different compared to today. In particular, higher interest rates and persistent inflation have a certain impact on M&A activities and must therefore be taken into account when applying the CTA.

In the second step, the transactions within the HCIT market were reviewed. Here, the takeovers of healthcare IT companies by private equity companies were of particular interest. These include for example the acquisition of athenahealth by Bain Capital and Hellman & Friedman in 2021, at an EV/EBITDA multiple of 25.0x and a resulting enterprise valuation of USD 17 billion (Bain Capital 2021). Although the size of the transaction exceeds the estimated valuation of CGM, this deal serves as a model for the CGM acquisition. As the focus of Athenahealth is primarily on software for the AIS segment, which is also the main focus of CGM, it is assumed that the investors follow a similar investment thesis. Their understanding of an appropriate valuation and the corresponding multiples is therefore a helpful guide for the acquisition of CGM. Besides takeovers by financial investors, acquisitions by strategic investors were also considered. Here, the takeover of the US-based health tech company Sentry Data Systems by Craneware in 2021 should be mentioned. The acquisition valued Sentry Data Systems at USD 400m resulting in an implied EV/Sales multiple of 4.4x and an EV/EBITDA multiple of 17.4x (Abry Partners 2021). However, it is important to take consider the ability of strategic investors to pay a purchase price above the standalone value of a company as they usually have the opportunity to realize synergies in the wake of the merger.

Calculation of Comparable Ratios

Besides the transactions mentioned above, ten further transactions were taken into account for the CTA. To ensure a comparability to the results of the CCA, the same multiples were calculated for the CTA. Equal to the calculation of the CCA multiples, the key financial information for each of the respective target companies has been retrieved. The enterprise value reported as part of the transaction was then divided by financial metrics to obtain the respective multiple. This resulted in a median EV/Sales multiple of 2.7x and a median EV/EBITDA multiple of 17.1x.

Further considerations

Similar to the CCA, it could have been useful to assign the target companies of the individual transactions to the identified application areas within the Healthcare Provider IT market, build several peer groups and weight the respective multiples per group according to the revenue split of CGM in order to obtain an even more accurate indicative valuation. However, as with the CCA, the selection of comparables was quite limited, which made this approach unfeasible. Further, no transaction could be identified that might have been used as a "perfect reference value" given a high degree of similarities with the planned acquisition of CGM.

General Shortcomings of CTA (non-exhaustive)

Generally speaking, the multiples and the implied indicative valuation derived from the CTA is strongly influenced by the individual circumstances of the precedent transactions considered. As mentioned above, the willingness of strategic investors to pay a premium on the standalone value, as they have the opportunity to realize synergy effects, can distort the valuation of company when applying the same multiples. Other aspects that may mislead the valuation of a company are the negotiation dynamics in the M&A process, which are significantly influenced by interest in the asset, (Rosenbaum and Pearl 2020) as well as the control premium that the acquiring company pays for the right to control decisions about the target and its cash flows (see chapter 2.1).

3.3. Discounted Cash Flow

For the valuation of CGM, we have chosen the DCF method based on the FCFF (see chapter 2.1). In the first step, an in-depth forecast of the future performance of CGM for the next seven years (until 2030) is developed. Based on specific growth rates for all four business segments, the revenue growth has been forecasted. The AIS segment shows an expected CAGR of 7.1% mainly driven by capitalizing on cross- and upselling opportunities via increased international brand awareness, re-seller involvement and sales campaigns. The HIS revenues are growing by a CAGR of 7.6% fueled by enhanced module offerings – notably the e-prescription service in Germany, which is scheduled for rollout in 2024. Driven by strategic acquisitions for 2024, the fastest growing segment is CHS, with a CAGR of 9.2%. In contrast, the PCS segment only shows a very moderate growth rate of 3.3% p.a. as the market is already saturated.

The costs associated with the revenues were extrapolated on the basis of specific cost drivers (e.g., personnel costs driven by the number of employees and costs per employee) and as a percentage of revenues. Applying the respective growth rates on each business segment and forecasting the corresponding cost items, the FCF until 2030 (last year of the detailed forecast period) has been calculated (see chapter 2.1). The FCF of each year is then discounted to the current nominal value using WACC – equals 9.2% based on a flat tax rate of 30%, a cost of equity of 11.7% and a pre-tax cost of debt corresponding to its risk structure of 6.8%. The cost of equity was calculated on the basis of CGM's leveraged beta of 1.37 and an equity risk premium of 6.0%. The beta results from a peer group analysis of seven companies, including Nexus AG, Software AG as well as other German software providers. The terminal value was calculated by applying a perpetual growth rate of 2.0% (roughly in line with GDP growth and inflation) to the FCF of last year within in the forecasted period (2030). After discounting all FCFs in the detailed forecast period as well as the terminal value using the WACC, the sum results in an enterprise value of EUR 2,975.4 million, which corresponds to an EV/sales multiple of 2.6x and an EV/EBITDA multiple of 12.9x.

General Shortcomings of DCF (non-exhaustive)

The DCF method is widely accepted for its theoretical details as it provides a indicative valuation based on an asset's ability to generate cash in the future, also considering the time value of money. However, it is not without its criticisms, especially given the significant sensitivity of the valuation to the assumptions regarding future cash flows and the discount rate. These subjective elements can lead to considerable fluctuations in the outcome of the valuation, which underlines the importance of thorough analysis and sensitivity testing in the DCF process. In the realm of the valuation of technology companies, the DCF further fails to take into account the value of technology that does not generate any direct profit but nevertheless brings value to the company, or technologies where future profits are difficult to estimate (Sun 2021).

4. Conclusion and Entry Valuation of CGM

The valuation methods utilized – namely CCA, CTA, and DCF – suggest an EV/EBITDA multiple range from 8.5x to 17.6x for the valuation. However, in the wake of the evaluation of the final entry EV/EBITDA multiple, the results from the CTA have been excluded due to the significant differences in market conditions compared to the periods of the comparable transactions as well as a lack of highly comparable precedents. Reviewing the valuation of three of the most comparable companies to CGM within the CCA – Nexus, Cegedim, and Equasens – the revealed EV/EBITDA median is 12.9x, which is consistent with the multiple derived from the DCF analysis. Applying the EV/EBITDA multiple to CGM's 2022 adjusted EBITDA of EUR 231 million results in an indicative valuation of c. EUR 2,780.0 million. This valuation is preliminary and may be revised following further detailed due diligence.

Individual Part Wenzel Bartolo Bayer: Value Creation, Due Diligence & a Successful Exit

1. Introduction

Following the executive summary, this paper will give an in-depth review of some of my contributions to the CGM ICP. This thesis will focus on three topics. The due diligence (DD) phase and its focus ahead of buying out CGM, the value creation through M&A after the acquisition, and the exit options and its process at the end of the investment period.

2. Key Areas of Due Diligence

Before purchasing CGM, a phase of due diligence will involve inspecting the company extensively on a variety of subjects as listed below. DD phases are typically employed to assess the associated risk, by identifying and evaluating potential financial, legal, operational and commercial risks associated with the target. In addition, a DD phase is instrumental in ensuring the accuracy of the valuation of the target company through a thorough review of the financial statements and cash flows, also supporting the determination of a fair and accurate purchase price. The strategic fit and potential synergies of the acquisition are also assessed at this stage. Additionally, due diligence is critical in verifying legal and regulatory compliance and uncovering any legal issues or potential liabilities that could impact the acquisition process or future operations (DePamphilis 2010). This chapter will provide a detailed description of what the DD phase will include ahead of potentially acquiring CGM. We have identified five areas of due diligence. Financial DD involves examining financial statements to understand the company's financial health, internal controls, and uncovering potential liabilities. Commercial DD concentrates on screening documents that generate a detailed understanding of the target company's commercial viability, risks and opportunities. Legal DD is critical for assessing the target's legal structure, compliance, and potential legal liabilities and to attain a level of

confidence in the likelihood of future legal disputes and establish favorable contractual arrangements. Operational DD focuses on evaluating the daily business operations and identifying operational strengths and risks. Lastly, we will examine the IT security risks associated with the business of CGM. This will include an assessment of the software security and the risk of external (cyber) attacks (Patel 2023). We see this process as essential to making an informed decision on whether to make the investment and at what valuation, as it also provides us with arguments for an effective negotiation process (Perry and Herd 2004). For each area, we have identified “key red flags”, which are items, that if occurred will interfere with the successful completion of the deal.

2.1 Financial

Financial DD involves a comprehensive evaluation of CGM's financial health and risks. Within this process we would like to attain enough knowledge of the firm's financial statements, financial policies, internal controls, and future financial projections. We have split this section of the DD process into two parts. First, we will assess the financial reporting at CGM. Generally, this means to analyze all parts of the financial statement with a special focus on the cash flow statement, capital expenditures, net working capital, and the cash conversion cycle. We also assess future capital requirements and the condition of CGM's assets. The main focus is on CGM's cash flow. The cash flow is one of the most important metrics in PE as it will be used to pay off the interest and principal of the debt the fund has borrowed to acquire the company (Bank of America 2023). Further capital expenditures have risen in recent years, which is currently lacking an explanation. Key red flags in this part of the DD are misstatements in the Profit and Loss (P&L) or cash flow statements, an overvaluation of intangible assets or investments as this may lead to future write-offs and lastly, any indication that the company might be unable to pay off creditors in the future (Harvey and Lusch 1995).

2.2 Commercial

Within the commercial DD, our fund will ask the management of CGM to provide documents supporting a detailed understanding of the target company's commercial viability as well as its risks and opportunities. We have split up the commercial DD process into four topics, customers, competitors, M&A targets and the market in general.

Within customers, we will analyze the customer base and define what differentiates the customer types, such as hospitals, private individuals, and public organizations. Investigating the seniority (how long they are CGM's clients) of these customers and the recurrence of their contracts is crucial for strategic planning (Howson 2006). Key red flag items include dependency on a few, large customers with a high sensitivity to price changes and a high churn rate. Within the competitor analysis we want to focus on an analysis of the competitor's product and service portfolio as well as an assessment of their financial ratios, strategies and operational excellence. A special focus will be on products that CGM currently is not offering and if there is a need to implement them in their current offering. Critical results in this DD process would be to find out that CGM has a comparative operational disadvantage, its competitors show much stronger financial ratios or a realistic threat of being taken over by larger competitors. The commercial due diligence also contains a distinct overview of current market trends. For CGM, following their segments, there are four markets to inspect. The markets for AIS, HIS, PCS and CHS. Understanding growth expectations will involve a complete analysis of current market dynamics and future projections. This process includes assessing market size, growth rates and trends in consumer behavior and preferences. Within the DD phase we will also hire external consultants and market experts to conduct an in-depth analysis of all metrics. This also includes examining the regulatory environment and its potential impact on the healthcare software industry. The aim is to identify the opportunities and risks associated with the industry, providing a solid basis for informed decision-making on investment or business expansion strategies (Kennedy and Soares

2020). Critical findings would be that CGM has missed key trends and changes which are now difficult to adapt to. An additional challenging conclusion would be that the current understanding regarding market growth exceeds its true prospects.

2.3 Legal

Legal DD involves identifying any legal risks resulting from actions completed within the business of CGM. Within this phase we would like to attain a level of confidence in the likelihood of future legal disputes and establish favorable contractual arrangements. The whole process involves reviewing legal documents, contracts, and compliance records to ascertain that there are no legal bottlenecks that might hinder the deal or expose CGM to future liabilities that we have not caused. This process offers full understanding of what is lawful in each country the firm is active in. This is especially important in healthcare, as this industry contains special regulations. As legal enquiries are highly complex, law firms should be hired to create a full legal due diligence report. Some of the topics covered among others are regulatory data, contracts with suppliers and customers, intellectual property rights, labor contracts and if there is a possibility of future legal disputes or any outstanding legal claims towards the firm (Harvey and Lusch 1995). As we are dealing with a software company handling personal data as a business model, we have put a special focus on data protection. Within new data protection regulations such as the EU-wide GDPR, telemedicine providers must adhere to certain rules, which are often complex and need a lot of documentation (Frielitz et al. 2019). These items will be checked in the DD phase. It would be alarming if the company has experienced large leaks of customer data in the past, along with unofficial, unreported incidents that may lead to legal disputes or payments in the future. Further concerning would be a lack of assurance and governance regarding internal data regulation and rules. Another concern is if existing contracts with employees, customers or suppliers contain illegal clauses that may cause future lawsuits.

2.4 Operational

Within operational DD, we will focus on the research & development (R&D) department and operational efficiency in general. Our goal is to assess the productivity and effectiveness of CGM's operations, and further identify potential operational risks. Additionally, we want to mitigate risks originating from the nature of CGM's operation such as the dependance on its developers and its innovations (Gaye, Hurley, and Robinson 2014).

Regarding the R&D department of CGM, we would like to obtain documents from its management that will help us to understand its structure and staffing needs. An examination of the product development process, from the initial research and development phase through to testing and eventual launch, is crucial to assessing the effectiveness of the department and the product lifecycle in general. Key red flags would be if we conclude that the department is chronically understaffed, or that its employees have high seniority and are expected to leave the company soon. It would also be of serious concern to us if we learned that we were not attracting the best talent, as this would mean that we would need to change compensation or other employee benefits (Adeosun and Ohani 2023).

Regarding the operational efficiency we need to evaluate the practicability of CGM's future strategy for operational enhancement. To do this, we must consider the feasibility, cost-effectiveness, and potential impact on current operations. This involves assessing how the strategy aligns with CGM's goals, their resources available, and the anticipated outcomes. In addition, the identification of capital expenditure requirements is crucial. This process involves determining the level of investment required to overhaul and improve efficiency. It requires a detailed analysis of the costs associated with implementing the strategy, including equipment, technology and human resources. This analysis should also consider the long-term benefits and potential return on investment to ensure that the expenditure is justified and aligned with the organization's strategic objectives. Red flag items include a chronic corporate inability to rollout or implement strategic or organizational changes in the past into daily operations.

2.5 IT Security

Lastly, as we are targeting a software company an extensive check of the technological infrastructure, the software quality, cybersecurity measures, and its intellectual property is crucial for us as investor, as its future performance is heavily dependent on that (Sherer, Hoffmann, and Ortiz 2015). Generally, we have split this section into two parts, external threats and internal software stability. Verifying the software stability includes an evaluation of its quality and performance, with a special focus on the reliability, scalability, and overall quality of the software products. This is due to the fact that the software adaptation rate is highly dependent on its usability and stability (Canal, Murillo, and Poizat 2006). This part also includes an assessment of the technological infrastructure of the firm, including a review of hardware, networks, and systems, to ensure that they are capable of supporting current operations and future expansion. The review also addresses the development processes, including a check of the methodologies, tools, and practices employed in software creation. Red flag items include regular interruptions in service and inadequate resources to maintain frequent updates. Further a certain secretiveness in giving access to their infrastructure, security measures and incident reports also gives a negative glimpse. Additionally, our DD process also addresses cybersecurity measures, particularly regarding the company's protection protocols against external attacks. When vetting intellectual property, a core asset for software firms, a strong shield against external data scraping must be installed. The review also includes a valuation of its security infrastructure, including firewalls, intrusion detection systems, and encryption protocols. We also want to check if there have been cyber-attacks in the past and how they have been handled. Red flag items include a high frequency of past hacker attacks, the IT department lacking state-of-the-art protection software and an employee structure with high seniority, suggesting a large number of future dropouts.

3. Value Creation by M&A

Private equity funds aim to create value in various ways during the holding period of their investments. For funds, there is a large selection of options to choose from. This includes, among many other options, add-on acquisitions. Acquiring add-ons means to purchase companies that can be integrated into a platform company already held within a fund's portfolio. The goal is to create synergies, accelerate growth, and increase the value of the investment. The synergies may arise from an expanded geographic reach, product line extensions or enhanced capabilities. Add-on acquisitions allow the portfolio company to scale more rapidly and efficiently than through organic growth. While we are pursuing multiple value creation strategies, we have also been looking for a suitable target to complement CGM and enhance our returns (Biesinger, Bircan, and Ljungqvist 2020). After examining CGM's M&A history, this chapter will explain the criteria we have used to find a fitting target, which options we had and which company we plan to acquire and integrate.

3.1 CGM's M&A History

Before selecting an appropriate acquisition target, we conducted a detailed analysis of CGM's historical M&A activity. Our objective was to gain a deeper understanding of the underlying motivations for their add-on acquisitions, the size and operational scope of the acquired entities, the specific market segments they covered and the intervals between each transaction. This analysis was intended to inform our decision-making process and ensure that any potential targets would be in line with CGM's strategic patterns and objectives as demonstrated by its past acquisitions. Over the past five years, CGM has pursued an aggressive expansion strategy, marked by the acquisition of over 12 competitors and firms that offer complementary services. Their M&A activities have predominantly taken place within the European market, with a significant number of acquisitions occurring in Germany, Italy, and France. CGM has also made a strong push into the US market. This expansion has been characterized by acquiring companies that operate across all of CGM's four business segments, signaling a comprehensive and well-

rounded entry strategy (Mergermarket 2023). By integrating these US-based companies, CGM has not only broadened its geographic footprint but has also gained access to a new customer base. This international growth initiative underscores CGM's commitment to establishing a robust presence in the US, which we are strongly supporting with our future measures. Their largest acquisitions in recent years was the buyout of Cerner's European business with a disclosed value of EUR 225m (CGM 2020). The rationale for CGM's acquisition of Cerner's European business, specifically their hospital information system portfolio in Germany and Spain, was to boost CGM's market share and after failing to acquire Agfa's healthcare business, the divestment of Cerner came to the right point in time. The acquisition was expected to enhance their market share significantly, especially in Germany, making it at the time the largest EHR provider ahead of Agfa Healthcare, which is now part of Dedalus (Green 2020). This move was part of a more focused growth strategy and was predicted to provide immediate margin accretion, with the acquired businesses boasting a higher EBITDA margin than CGM's hospital division. Next to that, CGM focused on smaller acquisitions up to EUR 100m, mostly private firms in the European market.

3.2 Future M&A

3.2.1 Strategy

Our M&A strategy was developed from two perspectives. Firstly, as seen in the chapter before, we analyzed CGM's past transaction. From this analysis, we concluded that it makes sense to increase market share through add-ons, but not to buy very expensive targets that overtake the firm in terms of target size, as they are easier to integrate and represent a smaller financial burden. We have also seen that the entrance of a market makes the most sense through the acquisition of a local player providing immediate access to an established customer base and local market knowledge, avoiding the time-consuming and costly process of building a presence from scratch. One also directly acquires critical assets, such as technology and talent. As we plan

to grow in the US market, this was a first step regarding our strategy conclusion. Secondly, we looked at our M&A strategy from a competitive perspective, in other words defining who CGM's competitors are in the current market and if CGM would be capable of acquiring them. This would help us increase CGM's market share and increase their pricing power. As both options can create value and increase CGM's profitability, we have decided that we will look at multiple targets for both strategies and then decide which one fits better into the business plan.

3.2.2 Potential Targets

Already during the historical financial analysis as well as the market overview our team dealt with a range of competitors that are potentially suited for a takeover by CGM. Generally, the ICP lists more than 15 competitors, which is only a glimpse of all market participants. Most of these companies do not show the financial characteristics, such as high EBITDA margins and strong growth, to be a good fit for a takeover. Especially the hypothetical purchase price, indicated by the target's enterprise value was one of the key exclusion criteria. By applying these minimum requirements, many companies fell out of consideration. Within our focus on either US companies that allowed a further market entry or European competitors, multiple companies in particular stood out to us. Among these were Nexus AG, Veradigm, GPI and CareCloud. Nexus AG, a German healthcare software provider operating in all four of CGM's segments and also its largest German competitor, would have been a great target for CGM to become the market leader in all segments in the DACH area. Additionally, to an EBITDA margin of 21.2% in 2022, Nexus AG has been growing strongly not only in Europe but also in the US. Ultimately, an enterprise value approaching EUR 1bn made us exclude Nexus AG from the list, following the cash projections in the operating model that allowed us to acquire a company with an EV up to EUR 400m. This constraint also made us exclude Veradigm. Within the range of acceptable EVs were CareCloud and GPI. In the end, we decided to invest into CareCloud due to several reasons. CareCloud's established presence in the United States, coupled with its focus on revenue

cycle management and cloud-based software solutions, aligns seamlessly with CGM's existing AIS footprint in the US market complementing and enhancing its strategic direction. This integration not only extends CGM's operational scope but also fortifies its market position, underpinning its future strategy with CareCloud's robust technological and service-oriented competencies. When integrating CareCloud into our financial model for an acquisition in 2023, our MOIC increased by 0.5x.

4. Exit Options and Target Buyers

4.1 The Private Equity Exit Process

As private equity firms seek to divest their stakes in portfolio companies, the identification of suitable buyers becomes a strategic imperative. Ahead of entering an investment into a target company, the exit proposition is a key point for analysts in PE firms to think about before acquiring a target. This means the ICP needs to include a chapter on this strategic rationale in which all options are thought through. After implementing all value creation actions into their investment, a PE fund's employees must think about how and when to exit the investment. The fund needs to consider different strategic approaches, and why they want to divest one of their portfolio companies. These approaches include several questions, which this chapter considers. First the financial motives behind the exit strategy must be examined. This means, at which valuation of the portfolio company is the fund willing to sell to satisfy their own expectations regarding their target return and collecting additional capital for further investments. Further the fund needs to understand if the exit at the exact certain point in time will show signs of strength or weakness. This includes realizing if the fund is currently in a state to provide the financial funds as well as the human capacity needed in the sale process. It also counts whether the company for sale is in the right place in terms of due diligence procedures that it will face. Additionally, the current market conditions and impact of the sale on the fund as well as on the company are part of the strategic considerations ahead of exiting an investment (Talmor and

Vasvari 2011, 324). For instance, in 2023, with inflation, rising interest rates and slow dealmaking the sale of a portfolio company could happen with a discount only (Plender 2023). This process not only demands a keen understanding of market trends and investor preferences but also a thought-through approach to negotiations and deal structuring. Recognizing the significance of aligning the divestment strategy with the right buyer profile, PE firms use their industry insights and network resources to conduct careful due diligence and evaluate potential buyers. These actions lead to a seamless transition of ownership and the maximizing of returns on the investment.

As a PE investor, there are several options to sell an investment, of which three are the most prevalent. The sale to a strategic buyer, a secondary buyout, or the exit through an IPO. A strategic buyer is typically a company that sees value in acquiring another company for strategic reasons, such as gaining market share or accessing new technology. Secondary buyouts involve one private equity firm selling a portfolio company to another, often seeking to maximize value through operational improvements. On the other hand, an IPO allows a private equity firm to sell shares of a portfolio company to the public, unlocking value and providing an exit opportunity. Each approach carries unique considerations and implications for value creation and liquidity, influencing the decision-making process for private equity firms. (Gilligan and Wright 2014, 83). The length of completion can vary from weeks up to several months as the M&A process includes meetings, due diligence processes and price negotiations and therefore has to be part of the PE funds considerations to whom they want to sell (Luypaert and De Maeseneire 2014, 301).

4.2 The exit of CompuGroup Medical

For CGM we identified the sale to a strategic buyer, the secondary buyout, or an IPO as reasonable exit opportunities.

The sale to a strategic buyer makes sense to us for several reasons. Strategic buyers often possess synergistic opportunities that can enhance the value of the portfolio company. These synergies may include cost-saving measures, increased market share, or complementary product and service offerings, leading to increased competitiveness and profitability. Such buyers may already have established distribution channels, customer bases, or technologies that can be leveraged to accelerate the growth trajectory of the portfolio company (Vild and Zeisberger 2014, 3). These variables contribute to the fact that a strategic buyer is willing to pay a premium for CGM. This premium can translate into significant returns for our fund and its investors, maximizing the value of their investment. Additionally, selling to a strategic buyer can expedite the exit process, allowing the PE firm to realize its gains more quickly, thereby freeing up capital for reinvestment in new ventures or existing portfolio companies. Lastly, at a point in future CGM will have reached its growth potential under our fund's ownership, as we cannot offer some of the opportunities as strategic buyers including vertical or horizontal integration with existing departments. A sale to a corporate buyer would allow CGM to further grow while we can exit the investment with a maximized return after a certain holding period (Drazdou 2023). We have identified SAP, GE HealthCare, Siemens Healthineers, Oracle Health Sciences, Software AG, and Philips Healthcare as the potential strategic buyer circle. Each of these companies either has a track record in acquiring IT healthcare companies or is a software company known for its aim to diversify into various software sectors. This chapter will use SAP and Oracle Health Sciences to show why we are convinced that an exit would be feasible with these companies. SAP could be a potential buyer due to two main reasons. Firstly, SAP already has an established product offering in the area of healthcare IT solutions such as healthcare HR solutions and hospital management software. With an acquisition, SAP could leverage CGM's existing software solutions and combine it with their own, to expand their customer base. Further, SAP has a strong track record in acquiring competitors to diversify and expand.

Recently, SAP has acquired Signavio GmbH (SAP 2021) and LeanIX GmbH (SAP 2023). Both were bought from PE investors and are expected to grow strongly, two characteristics that also apply to CGM. Oracle Healthcare, as another potential strategic buyer, does not only make sense as they are already very present in the IT healthcare sector, but also have an extensive track record in acquiring companies similar to CGM. In fact, in 2021 Oracle Healthcare acquired the remaining share of Cerner Corporation, an US-based supplier of health information technology platforms, which had already sold its Spanish and German business to CGM the year before (Oracle 2021; CompuGroup Medical 2020). Additionally, with an acquisition of CGM, Oracle Healthcare could increase its global outreach to Europe, making it a potential buyer of CGM.

A second identified option is the sale to another PE firm, called a secondary buyout. Through a secondary buyout our fund can maximize returns, leverage sector-specific expertise, and meet investment horizon requirements. According to previous research, secondary buyouts enable PE firms to achieve a very high valuation, ensuring we can generate an above average return on the CGM investment (Wang 2010, 1307). We have identified six potential PE firms as buyers, namely EQT, Francisco Partners, Thoma Bravo, Ardian, Hg and Vista Equity Partners.

Lastly, going public has become a well-tested option to exit. Due to the German roots, we would prefer the Frankfurt stock exchange. Frankfurt has also been a popular stock exchange for many PE investors in recent years for their portfolio firms to go public (Börse Frankfurt 2023). Additionally, European stock exchanges such as Euronext or the London Stock Exchange might also make sense. Lastly, the tech exchange Nasdaq could be a good choice after entering the US market as it is the place to go public for most technology firms. An IPO can provide liquidity, allowing our fund to convert its investment into cash, which we then could reinvest. Additionally, if successful, an IPO can enhance the reputation of our fund, showing its ability to successfully grow and guide a company to a public listing, which can attract future investors and partners. Unlike other exit strategies, the IPO provides the opportunity for a partial exit, where

we could sell just a portion of its stake while retaining some shares to benefit from potential future appreciation (Dong, Slovin, and Sushka 2020).

5. Conclusion

This paper stresses the fact that careful planning and the ever-present look into the future plays a huge role in private equity. The focus on the future is present in all sections of this document. Chapter 3 highlights the need for thorough due diligence, which aims to predict and reduce possible future risks arising from today's condition of the firm. Chapter 1 examines the process of considering different exit strategies, a vital process in predicting expected exit multiples, which again is a look into the future. Lastly, incorporating value creation strategies into the financial model is yet another way of forecasting future outcomes, emphasizing the principle of looking ahead as a key component of private equity decision-making.

Individual Part Charlotte Mayr: Investment Thesis and Value Creation Strategy

1. Introduction

Following the executive summary, this report will provide an in-depth review of the developed investment thesis based on a detailed analysis of CompuGroup Medical (CGM) itself and its underlying market. It also discusses the value creation strategy and its financial implications but excludes a detailed analysis of CGM's past and future M&A strategy, as this topic is covered in Wenzel Bartolo Bayer's individual part.

2. Investment Thesis

Commonly, the investment thesis of an ICP serves as an initial, sound, and concrete summary of key reasons to do the deal and should be viewed as a pre-due diligence exercise outlining the target's main features giving confidence about the viability of the acquisition. It also builds the foundation for the development of a promising value creation strategy, and its successful execution. Thus, for each and every investment opportunity a private equity fund investigates, it is mission-critical to carefully craft a profound investment thesis considering the target's strategic, operational, and financial development over recent years, its present condition as well as trends within the industry it is operating in. The following two sections will first briefly touch upon CGM's history before then detailing the investment thesis we developed for CGM.

2.1 CompuGroup Medical: A Brief History

Originally established as Compudent GmbH in 1987, CGM initially focused on Ambulatory Information Systems (AIS) for dental practices. In 1992, after a significant stock price drop, caused by the departure of co-founder and technical director Walter Schäfer, Frank Gotthardt acquired all common shares and merged it with his company Gotthardt Computer GmbH, from there on acting as CEO of CGM. Until today, Frank Gotthardt holds a senior leadership

role within the company, currently as Chairman of the Administrative Board since June 2020. CGM expanded into general practitioners' systems in 1993, entered the European Hospital Systems Market (HIS) in 2006, and ventured into Pharmacy Information Systems (PCS) in 2011 (CGM 2023). Most recently, under its Consumer and Health Management Systems (CHS) business unit, CGM has strategically branched into healthcare data solutions, connectivity, and personalization of the patient journey as well as telehealth, aligning with industry growth trends (Forbes 2021; Grand View Research 2023).

2.2 Development of an Investment Thesis on CGM

Our investment thesis is based on a detailed analysis of CGM's business operations and connected end-customers, significances in its historical financial performance as well as its underlying industry's market dynamics and trends.

2.2.1 Findings from the Company Analysis

A diversified, scalable, and sticky customer base – What immediately catches the eye upon taking a closer look on CGM's business model is the company's exposure to various customer end markets covering the entire healthcare value chain and patient journey. Through its comprehensive and international software portfolio, CGM serves healthcare stakeholders ranging from primary care institutions such as physician practices to clinical secondary care facilities and post-acute care centres as well as pharmacies, pharmaceutical companies, insurances, laboratories, and patients themselves. Interconnectivity of different software products and various add-on components complement the company's business model and allow CGM to develop software solutions customized to the specific requirements of each customer. This approach leads to increased switching costs and thus a robust and sticky customer base. Continued efforts to enhance this modular product portfolio are crucial for generating future cross- and upselling opportunities, which are pivotal future revenue

drivers, as will be explained in section 2.2.2.

High-quality and macro-insensitive revenues supported by governmental tailwinds –

CGM's top line shows a remarkable share of recurring revenues, amounting to 64.6% in 2022, mostly attributable to maintenance contracts that usually automatically renew for another twelve months if not cancelled. This, coupled with governmental tailwinds in the AIS, HIS and Telematics Infrastructure (TI) businesses as well as the fact that the implementation of advanced healthcare IT solutions is pivotal to combat pressures such as the shortage of skilled workers, wage inflation, and increased accessibility and demand for healthcare services, which are faced by the entire healthcare industry, (Grand View Research 2023; World Health Organization 2023), make CGM's revenues highly crisis resistant. Nonetheless, it is mission critical for CGM to continue developing high-quality cutting-edge software, particularly in the realm of cloud-enabled technology, to a) maintain pricing power and b) prevent customer migration to cloud-native providers. BNPPE's Cloud Scanner Survey, suggests that specifically in the AIS sector, physicians are more likely to switch software provider when moving their IT systems to the cloud.

Exiting extensive, organic growth-supporting investment phase –

Looking at CGM's bottom line growth shows significant potential for margin expansions now that the company transitions from its extensive M&A, personnel, and Research & Development (R&D) investment phase. Not only relative R&D and personnel costs already started to return to pre-investment phase levels of 18% and 45% (CGM 2023) but also CGM's above industry-median Sales, General & Administrative (SG&A) costs margin shows room for improvement through effective post-merger integration (PMI) of the company's six acquisitions in 2022 and 2023. At the same time, these past measures perfectly prepare CGM for future organic growth through its expanded market shares, skilled workforce, and technology leadership.

Continued efforts to optimize internal operational processes and infrastructure –

Especially in M&A-heavy markets, it is crucial to be able to efficiently integrate new companies into existing unified structures. Moreover, it helps CGM transform from ten regional silos to one European product house and thus save money on redundant and lengthy internal processes. First positive results of these measures have been accomplished in the European AIS business, exhibiting an increase in revenue per employee of 15% (CGM 2023). An example of these efforts constitutes CGM's long-term project "OneGroup" aiming at implementing one global internal IT system across subsidiaries. Furthermore, CGM has successfully launched its own internal AI tool "ChatCGM", which has the potential to significantly boost employee productivity, particularly in R&D, Service & Support, and internal Business Operations, if implemented, communicated, and operated properly.

2.2.2 Results from the Industry Analysis

In each of CGM's business units competition is notably intense, with the market primarily dominated by two or three key players who collectively hold about 50% of market share, followed by a fragmented tail of smaller competitors. Despite this, CGM has managed to achieve market leading positions across all its business areas throughout several European countries as well as the US. The company's competitive stance in these regions is detailed in appendix 1.

International, market-leading, and healthcare industry-digitizing company – CGM's market-leading position and established international presence help the company capitalize on international cross-selling opportunities. While international cross-selling proves to be difficult due to regional regulatory differences, CGM's global infrastructure, combined with its significant commitment to R&D – with nearly 30% of its workforce dedicated to this area – facilitates the efficient creation of modified software tailored to specific country requirements. This capability is a crucial competitive edge for CGM, particularly given that many of its competitors concentrate their business activities within specific regions.

We identified CGM's AIS and CHS business units to be the most attractive based on a detailed analysis of the underlying market environments, which are most distinct on their level of saturation, the nature of their end-customers, and the duration of sales cycles. The former is higher for the AIS and PCS markets, however, highest in the PCS market – with growth driven by cross- and upselling, regulatory updates, and price increases – medium for the HIS market, where many hospitals are still equipped with outdated ERP systems and the number of new hospitals is still slowly increasing (BNP Paribas Exane 2022), and low for the CHS market, that is driven by growing receptiveness of consumers for personalized, technology-backed, and data-driven health initiatives (CGM 2023). Sales cycles vary based on different factors such as the processes for order acquisition, project sizes, and implementation durations. For AIS and PCS projects, both the project sizes and implementation periods tend to be smaller and shorter. In contrast, HIS projects usually involve larger scales and longer durations, primarily because hospitals are larger institutions. Furthermore, HIS operations are generally less profitable and more complex than PCS or AIS operations due to hospitals typically facing more financial constraints and being more dependent on regulations. This is also reflected in CGM's historically average HIS business margin of 14% compared to 29% for AIS. Sales cycles for CGM's CHS activities, like TI connector implementations or data-driven modules, vary but also tend to be more favorable because of their less project-based nature (CGM 2023). CGM's early entry into the CHS business and its strategic decision to increasingly focus on this segment, as evidenced by recent acquisitions of INSIGHT Health and m.Doc (Mergermarket 2023) repeatedly demonstrated the company's ability to anticipate market developments and enable it to pioneer and capitalize on increased healthcare datafication and customerization. This strategic direction aligns CGM with the significant growth potential in healthcare data analytics and telehealth markets, as indicated by the impressive double-digit compound

annual growth rates (CGAR) mentioned in the executive summary part of the document (Fortune Business Insights 2023; Verified Market Research 2023). A crucial aspect of CGM's CHS business is its unique access to diverse data sets, a by-product of the company's versatile business activities. CGM consolidates data from ambulatory services, pharmacies, insurance, and wholesale sectors, facilitating the production of unique data insights for various stakeholders. This integration is key to realize the strategic shift towards developing a comprehensive health data intelligence suite across Europe.

3. Value Creation

The subsequent chapter provides a detailed description and analysis of the developed value creation strategy for CGM, after giving a brief theoretical overview of the chosen value creation initiatives. Appendices 2 to 5 present summarized projections of the anticipated financial outcomes resulting from these proposed strategies.

3.1 Major Sources of Value Creation in Private Equity

PE firms create value primarily through a few key levers, which are defined below. Please note that there are many more value creation strategies, often highly individualized to each specific portfolio company. For CGM, we have focused on value creation through margin improvements, M&A, organic growth initiatives, and strategic as well as operational support.

The former and latter are often tightly connected and in our case focus on making improvements within the cost structure while positioning the acquired company well for sustainable future growth, as this has a direct impact on the bottom line and cash generation ability of the portfolio firm. PE investors identify areas where costs can be reduced without compromising product or service quality, such as streamlining supply chains, optimizing procurement processes, or reducing personnel expenses through efficiencies. These measures not only reduce operational expenses but also improve margins, enhancing the overall

financial health and competitiveness of the company. PE investors might also make changes to a firm's business model including a shift from one-time income to subscription-based recurring revenues (Kaplan, and Strömberg, 2009). Please find more information on the margin improvements and the strategic and operational support we plan on CGM in chapters 3.2. and 3.4, respectively.

Another major source of value creation for private equity funds is M&A. By identifying and leveraging synergies of acquisitions and effectively integrating new entities into the portfolio, private equity firms can generate significant value. These synergies often manifest in cost savings, increased market share, and enhanced operational efficiencies, as the combined entity can optimize resources, and eliminate redundancies. Acquisitions also enable companies to access new markets and customer bases, diversify product offerings, and thus accelerate growth, thereby increasing the overall value of the portfolio company. Additionally, strategic changes, such as repositioning the company in the market, and management upgrades play a crucial role in enhancing the overall value of the target company through strategic add-on acquisitions. Certain PEs also focus on the M&A-based strategies named "Buy & Build". This strategy involves acquiring a platform company and then significantly expanding it through subsequent add-on acquisitions. This approach allows the PE firm to consolidate fragmented markets or sectors, leveraging the platform company's infrastructure, brand, and operational capabilities. The aim is to create larger, more efficient, benefiting from significant economies of scale, expanded market reach, and enhanced competitive positioning (Mikołajczyk and Owedyk 2020). More information on the strategic acquisition planned for CGM can be found in the ICP as well as Wenzel Bartolo Bayer's individual paper.

Furthermore, private equity firms create value through organic growth initiatives such as the acquisition of new customers or cross- and up-selling. The strategy's goal is to enhance the

inherent capabilities and market position of the portfolio company and it includes the development of new products or services and expanding into new markets, thereby increasing existing market share. Additionally, new products can be sold to the existing customer base. Finally, an organic growth strategy could also include strategic repositioning of the acquired company, which may involve geographic expansion or product line diversification (Biesinger, Bircan, and Ljungqvist 2020).

Overall, the major source of value creation in private equity can be attributed to EBITDA growth through organic top-line growth, M&A activities, as well as operational and margin improvements. Other sources include deleveraging and multiple arbitrage, where the latter does not play a role in our planned acquisition of CGM. The stated levers enable private equity firms to generate value for their investors and stakeholders through a combination of operational excellence and financial optimization. All this can only be achieved through the help of an engaged management often incentivized by equity stakes in their firm to align all stakeholder interests (Leslie and Oyer 2008). One mechanism to achieve this is sweet equity, which refers to the issuance of discounted or free shares to the management as part of their compensation. This will also be done in the case of CGM.

3.2 Margin Improvements

Re-boosting its current margins is crucial for CGM, as the firm has experienced a consistent decrease in margins over the last four years. Now is the moment of truth for the company to prove that its recent significant investments combined with our measures can lead to increased profitability in operations. The recovery of relative personnel expenses to and below historical averages stands out as a key strategy for CGM in this context. Optimizing these costs, depending on their percentage share of total costs, can substantially enhance the company's profit margins, involving measures like streamlining workforce management and leveraging technology to boost productivity. Such strategies are essential not just for

stabilizing the company's finances in the short and medium term but also for ensuring its profitability and growth in the long term. Based on historical averages from 2018 to 2022, CGM's cost structure is distributed as follows: costs of goods and services purchased account for 19%, other expenses for 17%, and personnel expenses for 45%, showing that the latter are the main component of CGM's cost profile. The recent increase in personnel expenses to 49% is due to ramped-up recruitment efforts to secure skilled workforce (CGM 2023). As CGM transitions from this phase of heightened investment, it is expected that personnel costs will decrease, while the integration of AI is projected to further enhance productivity in for example coding and R&D, offering more opportunities to cut personnel expenses. By 2028, CGM is expected to improve its personnel cost margin by 620 bps, lowering it to 42.2%. Within the holding period, the cumulated cost efficiencies achieved from this initiative correspond to EUR 410m. The remaining value of EUR 1,178.0m created through margin improvements can be attributed to expected synergies from recent M&A activities including SG&A costs re-approaching industry-levels, the planned acquisition of CloudCare as well as focusing on CGM's AIS and CHS segments, exhibiting high margin potential. The overall effect of margin improvements on the value creation amounts to money on invested capital (MOIC) of 0.9x.

3.3 Organic Growth Strategy

As previously discussed in chapter 2.2.2, we identified CGM's AIS and CHS business units to be the most attractive. Despite its historical high margins, PCS is perceived as less appealing due to its considerable market saturation. Additionally, emerging trends such as a rapid transition to e-prescriptions, exhibited by Germany's recent draft act for the "DigiG" (Act to Accelerate the Digitalisation of the Healthcare System), suggesting compulsory e-prescriptions to start in January 2024, could further drive the movement towards online pharmacies and platforms (Gleiss Lutz 2023). This shift could accelerate the reduction of

accessible customers for CGM's PCS business, a trend that is already exacerbated by growing closure of independent pharmacies and the trend towards pharmacy conglomerates with higher pricing power (Deutsche Apothekerzeitung 2023). Therefore, we have created a three-component action plan for the AIS as well as the CHS segment.

In the AIS segment, this plan includes the introduction of CGM's paramedics software "VEGA" to the remaining EU and the US market. Since its launch in 2020, the software has grown to be the #1 paramedics software in France serving more than 50,000 nurses, physiotherapists, and speech therapists (EHEALTHCOM 2019; CGM 2023). Further, CGM has to prepare for and capitalize on the second stage of France's ambulatory healthcare digitization program "Ségur", which is expected to start in 2024. This will enable CGM to place upgrades to existent software versions of up to 100,000 French AIS customers. Moreover, the continued development and expansion of CGM's cloud-enabled software offerings, already including for example "CGM Studio", "CGM XDent", and "CGM Clinical", are poised to drive revenue growth by promoting up-selling opportunities. The overall impact of created value through organic growth within the AIS business amounts to ~ EUR 881.3m, which translates to a MOIC of 0.5x.

In the CHS segment, two more cross-selling campaigns are set to drive organic growth. The first involves incorporating CGM's telehealth and patient engagement online tool and app CLICKDOC, into the existing AIS customer platform. By enhancing the tool with additional features focused on a personalized and higher-quality patient journey – for example through implementing invoicing capabilities and premium subscription options – we expect to see an expansion of CLICKDOC's user base. The second cross-selling initiative comprises spreading CGM's developed healthcare data solutions suite, consisting of INSIGHT Health, Therafox, GHG, and Intermedix, among existing customers. Further, CGM is set to acquire new customers through the internationalization and scaling of this data suite, which will be

facilitated by the recent acquisition of a 20% stake in the Italian company New Line RdM Società Benefit S.p.A, which offers data analytics for pharmaceutical market participants. Due to the integrated nature of CHS products, value creation within the segment is closely tied to and partly overlapping with other segments, in particular the AIS segment. Still, we derived a standalone value creation from CHS initiatives of ~ EUR 407.5m, thus 0.2x during the holding period.

But why do we think that these initiatives will work. Brand recognition and cross-selling, fueled by focused sales campaigns, distribution partnerships, as well as an increased market share and customer base in the US, will be a key driver of organic growth. Effective sales campaigns elevate brand visibility, which is of key importance for organic growth within the fragmented e-health market. Increased involvement of trusted resellers, such as Power Unlimited, extend market reach and reinforce brand credibility, further stimulating organic expansion. Confidence in the developed strategy is bolstered by CGM's well-established customer base across various market segments. Even slight modifications to specific software offerings could entice customers from different sectors to engage with CGM's existing products (Kamakura 2008). Furthermore, taking the data business global, starting with the Italian market entry, is anticipated to provide CGM with access to a market of previously unknown size. Drawing on and effectively communicating the company's exclusive data access as well as its acquired analytical and multi-channel communication capabilities will be a key asset for the planned internationalization (CGM 2023). Furthermore, our strategic decision to offer an equity package to three key members of CGM's top management (CEO, CFO and Head of HIS) ensures a collective drive toward the realization of the presented action plan and the company's long-term growth. Overall, we expect the value creation from organic revenue growth to amount to EUR 1,651.3m, equalling an MOIC of 0.9x. Thus, ~ 0.2x of the MOIC are expected to be generated by

CGM's hospital and pharmacy business.

3.4 Strategic and Operational Support

The strategic and operational support during the holding of CGM is designed to pivot the company towards a cloud-based, future-proof business model with optimized recurring revenues, setting the stage to evolve CGM into a fully SaaS-oriented business. Presently, CGM's revenue is primarily derived from software maintenance fees and initial license charges, which grant customers perpetual access to the current version of the software, however, without subscribing to any updates. The key objective is to streamline CGM's transition to a subscription-based model shifting away from reliance on one-time payments to a more reliable and consistent revenue framework, benefitting both CGM and its customers. Again, one must examine the clear realization of this plan. The transition to a subscription-based IT model will be started through targeted customer education, highlighting the benefits and enhanced value proposition. After that a phased approach will be adopted to discontinue perpetual usage rights for legacy license customers. Lastly, to minimize customer attrition, incentives will be provided to encourage customers with legacy licenses to migrate to subscription contracts instead of changing to another license provider. Throughout the holding period this initiated transition, as well as leveraging INSIGHT Health's robust foundation of 80% recurring revenue and a planned flat rate model for the TI will grow CGM's recurring revenues by 480 bps to 69.4%.

Our strategic plans will also target a state-of-the-art topic which no current investment opportunity might miss on: artificial intelligence (AI). Although in everyone's mouth, often without any real value, we are convinced that CGM is in a position to lever AI to truly create value. Beginning with evidence, a growing number of patients are placing their trust in AI as they express comfort with AI-assisted medical diagnoses provided by physicians. They are also demonstrating a willingness to share their health data with intelligent learning systems,

signifying widespread acceptance of AI as a useful medium for patient interaction (CGM 2023). CGM has proactively embraced AI both within the company and in its product offerings. Internally, employees benefit from "ChatCGM," an AI-powered chatbot providing R&D and coding support alongside general assistance. Externally, CGM's suite of AI-enhanced products includes for example an intelligent reimbursement module within CGM's US reimbursement software "eMedix", and "THERAFOX," a data-based tool facilitating drug therapy safety checks for physicians as well as pharmacists. These innovative solutions not only position CGM favorably in the current technological landscape but also provide a solid foundation for future developments with the doctor-patient relationship becoming more and more digital (Lorenzini et al 2023). To be at the forefront of future AI advancements, we are planning on additional R&D for AI use cases supported by strategic partnerships to position CGM at the forefront of these advancements. We identified Abridge as a highly suitable candidate for such a strategic partnership. Abridge's AI turns patient-doctor discussions into a real-time structured draft for clinical notes, and seamlessly incorporates it into the patient's electronic health record (EHR). This technology seamlessly complements CGM's current clinical notes tool, broadening its utility from static documents to real-time conversations.

4. Conclusion

In conclusion, CGM is and will be strategically positioned for considerable growth and value creation, utilizing a balanced approach of margin enhancement, M&A, and organic growth initiatives, all supported by strong strategic and operational guidance. The shift towards a cloud-based, SaaS-focused business model, along with increased ventures into AI-driven technology, will continue to place CGM at the pioneering front of healthcare IT advancements. This proactive approach is key to maintaining CGM's relevance and success amidst the dynamic landscape of healthcare technology. Supported by its robust market presence and a broad

customer base, we believe that these strategies build a strong investment opportunity, with the potential for substantial returns.

Individual Part Marlin Egbuna: Private Equity Trends & Leveraged Buyout Impact

1. Introduction

LBOs are a significant tool utilized in PE, having evolved remarkably over the years, influenced by shifting market dynamics, regulatory changes, and advancements in value creation. This thesis analyses the mechanics of LBOs, the current state of the PE industry, and finally, draws references on the analysis on CGM as an attractive LBO candidate. The notion of LBOs, in which private equity firms utilize leveraged capital to acquire attractive firms, has been widely scrutinized for its influence on corporate finance and management (Jensen, 2019). Nonetheless, the PE activity has grown tremendously throughout the year, laying the foundation for a theoretical analysis of the strategic rationales behind LBO. As such, this thesis will introduce the basic concepts behind LBOs, followed by an examination of the standards that render a firm an appealing LBO candidate. Furthermore, the paper will provide context for the LBO discourse amidst the current PE market landscape. The constantly shifting market conditions form a backdrop against which the strategic considerations of LBOs can be comprehended. This encompasses an assessment of market trends, hurdles, and possibilities that are currently shaping investment decisions. Finally, a key element of the success of an LBO is the target company's operating and business model, which significantly impacts the outcome and feasibility of the transaction. As such, the paper aims to investigate this element by reviewing the analysis conducted in the ICP of CGM and provide further references to the LBOs funding structures as well as return analysis.

2. Leveraged Buyouts a Conceptual Introduction

Leveraged buyouts, which involve the acquisition of companies through significant debt financing, have become a popular strategy in the field of private equity. The origins of LBOs can be traced back to the early 20th century. However, it was during the late 20th century,

notably in the 1980s, that corporate buyouts underwent a significant transformation due to strategic evolution (Gaughan, 2010). While the RJR Nabisco buyout is a well-known example, more contemporary cases such as the KKR, Bain Capital, and Merrill Lynch's 2006 acquisition of HCA Inc., one of the largest LBOs at the time, provide insights into pre-financial crisis LBO mechanics and strategies.

In general transactions, LBOs utilize leverage to enhance equity returns, with the acquired entity's assets frequently acting as loan collateral (Rosenbaum and Pearl, 2021). This debt is then serviced using the cash flows generated by the acquired company. One of the key mechanisms in an LBO is the careful structuring of the debt, which often involves a mix of bank loans, bonds, and mezzanine financing, each tiered according to varying levels of risk and return (Kaplan and Strömberg, 2009). The assessment of investment performance and value creation is primarily gauged using two key metrics: the IRR and the MOIC. These metrics provide insights into the efficiency and effectiveness of both fund managers and the operational strategies implemented within portfolio companies. Fund managers leverage IRR to make decisions about capital allocation, to compare the performance of different investments, and to signal the fund's performance to limited partners (LPs). However, IRR can be sensitive to the timing of cash flows and might not fully capture the overall financial risk or the amount of capital invested. As noted in a study by Kaplan and Schoar (2005), IRR is a preferred measure for fund performance, but it must be considered alongside other factors such as the size of the fund and the investment period. On the other hand, MOIC is predominantly used to evaluate the absolute return generated by an investment, making it a straightforward measure of the fund's performance. According to Phalippou and Gottschalg (2009), MOIC is particularly useful in understanding the value generated before considering the effects of leverage and the holding period of investments. Drivers of both metrics are multifaceted. They include operational improvements within portfolio companies, market timing, leverage, equity contributions and the strategic exit timing

of investments. Operational improvements, such as cost reductions, revenue growth strategies, and efficiency enhancements, directly contribute to the increased value of a portfolio company, thus impacting both IRR and MOIC. The ideal operational model post-acquisition focuses on enhancing the company's profitability and cash flow generation capabilities. This could involve strategies like cost reduction, asset sales, or strategic redirection, aimed at increasing the company's value and hence, its ability to service the debt. However, fund managers also have capabilities to enhance returns before and during the holding period, either through offering management roll-over options, hence reducing the upfront equity contribution, or dividend recapitalizations and strategic add-on acquisitions.

The end goal of an LBO is typically to sell the company at a desirable return, either through a public offering or sale to another firm, within a period typically ranging from three to seven years (Robinson and Sensoy, 2013). This exit strategy is crucial, as it determines the success of the LBO in terms of return on investment for the stakeholders involved. This strategy goes beyond pure financial leveraging by incorporating operational and strategic enhancements aimed at unlocking intrinsic value in target companies (Kaplan, 1989).

3. Ideal Criteria of an LBO Candidate

In the realm of PE, the selection of a suitable candidate for an LBO is rooted in a solid understanding of various financial and operational parameters. Jensen (1986) laid the foundation for this understanding by emphasizing the importance of cash flows, a critical factor in ensuring the ability to service the debt incurred in an LBO. Expanding on this, Kaplan (1989) highlighted the general potential in companies with underperforming operational efficiencies. These organizations, when strategically restructured, offer substantial value creation opportunities post-acquisition. Furthermore, a solid asset base provides collateral for the substantial debt financing integral to LBOs. Complementing this, companies undervalued by the market further represent lucrative opportunities for PE firms, allowing acquisitions at lower costs and the

potential for value realization through strategic improvements (Moonfare, 2023). Additionally, PE investors rather seek for targets with the need for low future capital expenditure requirements. This aspect is crucial as it allows a larger portion of cash flow to be directed towards servicing the buyout debt, enhancing the financial viability of the LBO. Kaplan & Strömberg (2009) brought to light the significance of an effective management team. In the period following an LBO, a competent management team is vital in ensuring continuity and implementing necessary strategic shifts.

An additional layer was provided by Rosenbaum and Pearl (2021) who mentioned the importance of a firm's competitive market position or unique value proposition. These qualities are essential for sustaining and growing market share. Furthermore, they also identified industry characteristics as a determining factor, with certain industries offering more favorable conditions for LBOs due to their market dynamics and regulatory environment.

4. The Current State of Private Equity

In 2023, the PE sector is navigating a dynamic period, marked by shifts influenced by complex macroeconomic factors, and evolving strategic priorities, diverging from the post-Covid surge in deal-making to a phase of strategic reevaluation amidst new challenges and opportunities (Bain & Company, 2023). The PE landscape, characterized by robust growth in the recent past, experienced a slowdown in 2022. This was primarily due to rising interest rates, influencing underlying financing capabilities, and broader economic uncertainties, leading to a decline in deals, exits, and fundraising activities. This shift denotes a significant turn in the PE cycle, moving away from the patterns observed during low interest environments and calling for strategic recalibration by PE firms. Macroeconomic influences, including inflation and global shifts, have directly impacted PE operations. The diminished availability of cheap debt financing has required PE firms to adapt their investment approaches in response to this new economic reality. High leverage now comes at a cost of increased margins and underlying base rates,

directly influencing cash interest expenses. In addressing the current economic climate, characterized by inflationary pressures and supply uncertainties, PE firms are focusing on efficiency and cost reduction, emphasizing digital transformation in data analytics and cloud infrastructure to foster operational improvements (PwC, 2023).

Furthermore, the economic uncertainty has spurred an increase in add-on transactions, reflecting a strategic shift towards smaller, more manageable transactions that can generate synergistic benefits across portfolio companies. These transactions provide an efficient way for PE firms to deploy capital while realizing potential revenue and cost-saving synergies (Cherry Bekaert, 2023). On the capital generation side, fundraising has become more challenging, with a drop in capital raised compared to previous years. Several funds across the board have missed their underlying fundraising target, a trend that continues onwards into Q3 2023 (Buyout, 2023). In parallel, private credit has gained prominence, evolving into a growing component of the debt structure in leveraged transactions (Cherry Bekaert, 2023). Traditional LBOs are characterized by a significant reliance on debt, often with a mix of senior bank debt, mezzanine financing, and high-yield bonds. Each of these components plays a distinct role, with senior debt typically secured against the assets of the target company, mezzanine financing offering a blend of debt and equity features, and high-yield bonds providing unsecured debt at higher risk and return levels. In the recent months, there has been a notable shift towards more diversified and sophisticated financing structures offered by private credit funds. This evolution reflects both the changing regulatory landscape post-2008 financial crisis, through stronger regulation on banks, and innovations in financial products. As such, the rise of private credit funds and direct lending has provided flexible and tailored financing solutions, especially prevalent in middle-market take-over transactions. Unitranche loans, which combine senior and subordinated debt, have gained popularity for their efficient approach and potential cost benefits.

Another ongoing trend, utilized by General Partners (GPs) are continuation funds as a vital exit strategy, especially for extending the holding period of portfolio companies beyond the original fund's lifespan. These funds, emerging as a type of GP-led secondary transaction, enable strategic continuation of (high-performing) assets, offering benefits such as tapping additional investor commitments and increasing investment opportunities. The evolution of continuation funds from a tool for managing struggling assets to a strategy for maximizing returns on successful investments marks a significant shift in PE exit mechanisms and how GPs generate returns for their Limited Partners (LPs).

Despite the above trends and challenges, the private markets sector has maintained growth momentum, with assets under management reaching new heights. However, the performance of PE assets has declined, influenced by factors including the aforementioned credit availability and valuation uncertainties (McKinsey & Company, 2023). To conclude the above, the PE sector in 2023 is marked by a transition from rapid growth, especially compared to 2021, to a more nuanced phase characterized by strategic recalibration, a heightened focus on sustainable and digital investments, and evolving approaches to fundraising and deal-making.

5. The Current Growing Interest in Technology Buyouts

The recent upsurge in PE involvement in the technology industry, particularly through take-private transactions, marks a significant trend in the investment landscape. Over the past two years, this shift has been characterized by PE firms targeting software companies with stable and predictable cash flows, a feature particularly prominent in Software-as-a-Service (SaaS) models. These firms often offer value creation opportunities, some of which are currently undervalued in the public market despite strong growth prospects. Operational improvements and digital transformations under PE guidance are key strategies to unlock this value. For instance, the acquisition of Software AG by Silver Lake and the takeover of Mimecast by Permira exemplify this trend. These deals highlight the strategic focus of large cap PE firms on mature technology

companies with secure business models and an established market position. The inclination towards such investments reflects a broader recognition of the software sector's resilience and growth potential, making it a lucrative area for PE investments.

There are several compelling attributes making enterprise software investments an attractive opportunity to PE firms. The recurring revenue streams, high predictability of cash flows, and minimal capital expenditure requirements are chief among them. Furthermore, enterprise software companies are well-suited for consolidation strategies, creating operational efficiencies, enhanced distribution channels and cross-sharing customer bases. In a volatile economic climate, businesses are prioritizing operational efficiency to reduce costs, and enterprise software has emerged as a strategic solution. Additionally, the extended product life cycle of enterprise software products adds to their investment appeal, as these solutions often remain relevant for a decade or more. The current market conditions are in favor of PE investors in the enterprise software sector. Reduced valuations and diminished competition compared to previous years make take-private deals increasingly attractive. Companies struggling to achieve profitability in public markets could find PE's patient capital and long-term focus particularly appealing. While the use of debt in software LBOs has decreased, there has been a shift from a "growth at all costs" mentality to a more sustainable, profit-oriented approach (CNBC, 2022). This change reflects the evolving investment landscape in the enterprise software sector. Furthermore, the potential impact of artificial intelligence (AI) on enterprise software cannot be understated. As AI technologies continue to evolve, companies are likely to acquire AI-focused firms to enhance their existing software solutions. This trend may further stimulate M&A activity within the sector.

6. Analysis Review on a Potential Buyout of CompuGroup Medical SE

6.1 LBO Funding Structure

In light of the above, our analysis of CGM as a potential buyout target has also taken into account trends that we currently see in the PE industry. Especially with regards to debt financing, the landscape of leveraged finance and buyout lending is undergoing notable changes, primarily influenced by global increases in interest rates. This shift has rendered traditional term loans, once an affordable financing option, to become significantly costlier as base rates and margins have gradually increased over the past year. Furthermore, the recent challenges faced by major banking institutions, exemplified by the collapse of Credit Suisse, have led to a strategic shift towards less risk-taking. As a response, private credit lenders have begun to take-over some of the market share in buyout lending. In response to these market dynamics, we have incorporated two financing structures into our model, each amounting to 5.5x leverage. The first structure follows a more conventional approach, including a traditional Term Loan A-C structure with a revolving credit/M&A facility and an additional payment-in-kind (PIK) instrument. The second incorporates a private credit structure with a unitranche loan coupled with a similar revolving-credit facility for M&A and cash purposes. While our ICP primarily utilizes the first structure, the second offers potential advantages in enabling greater flexibility for strategic add-on acquisitions, owing to the minimal or non-existent mandatory repayment terms associated with the unitranche loan. This is in-line with our idea in the ICP to potentially acquire a more established and larger target.

On the equity financing side, we have opted to engage management through an incentive mechanism known as sweet equity participation, amounting to a 5% stake in the entity. This approach is increasingly vital in the current high-interest-rate environment, emphasizing the importance of a competent management team in driving value creation beyond mere financial engineering. Sweet equity aligns the financial interests of the management team with the company's performance, incentivizing them towards enhancing corporate value. Especially for

technology and healthcare sectors, retaining top management is crucial with regards to value creation, driving product innovation, and introducing new software products to customers. Michael Rauch, the CEO of CGM, along with Hannes Reichl, who heads the HIS department, and select second-tier management members, are poised to receive equity participation in the buyout. This strategic move is designed to align their interests with the company's objectives, leveraging their expertise and leadership to effectively meet the targets outlined in our action plan. The remainder of the equity is sourced from the sponsor, comprising a direct equity contribution and a shareholder loan with PIK interest, akin to a preferred equity arrangement.

6.2 Operating Model

Building upon the insights in Kaplan (1989) on post-acquisition operational efficiencies, CGM's model exhibits elements of both cost savings and top-line expansion. The company's organic growth is fueled by capital expenditure in intangible assets like software rights and customer relationships, essential for introducing new products and segment growth. Furthermore, there is a gradual shift from offering one-off software rights to a subscription-based business model. However, general growth varies across segments. CGM is expected to maintain robust performance in its core departments (HIS, AIS, and CHS), while segments like PCS are likely to follow a steadier growth path. Key aspects to consider here are the United States (US) expansion, also through the acquisition of CareCloud, which includes a large customer base of 40,000 providers, the further improving growth trajectory of the AIS business in Germany and internal synergy effects created through the consolidation of the AIS and CHS segment. Leveraging AI within the CHS business promises to boost top-line growth, especially with an anticipated increase in innovative product demand from ambulatory clients. Another important point to take into consideration is the firm's strong M&A track record. Synergies stemming from recent transactions are yet to be realized and can further positively impact the top line growth of CGM. These combined aspects very well reason for a development of high single digit growth

across the top line in the early stages of the investment period. With regards to EBITDA margin expansion, due to past M&A acquisitions, the firm's personnel expenses have increased significantly. In light of less M&A activity and a stronger focus on margin improvement through staff efficiencies, we therefore expect a slowdown in personnel expenses in relation to total revenue and a conservative 1% gross profit margin improvement as the firm is shifting more towards a SaaS business model.

Furthermore, the rising interest rates significantly impact CGM's net income and the cash flow available for debt repayment. While PE firms have historically capitalized on a low interest rate environment, we believe with current base rates and increased margins finding a target with stable cash flows is of even greater necessity. Our analysis of CGM underscores its stature as an attractive investment target, particularly highlighted by the firm's robust and improving cash flow conversion ratio. The firm demonstrates a notable upward trajectory in this metric, advancing from an initial 31.4% to 45.9% at the projected exit.

6.3 Return Outlook

In our return analysis, we concluded the holding period to last until 2028, with the CareCloud transaction concluding in the earlier stages of the investment period to fully realize synergies from the transaction and potential economies of scale in the North American market. The investment case still has provided a solid combined return of 22.9%, in line with general hurdle rates for PE investors based on the current market environment. Especially management has a key incentive to remain in the firm based on the underlying MOIC of 8.7x and an IRR of 43.4% at exit. Furthermore, we have made the conservative assumption to exit at the entry multiple. It must be noted that, given the steep hit that technology and healthcare firms received in terms of valuation and a further add-on acquisition of CareCloud, there exists argumentation for multiple arbitrage at exit. The macroeconomic environment has significantly influenced valuations, particularly entry multiples in the technology and healthcare sectors. The projected acquisition

multiple of CGM at 12.9x EV/EBITDA marks a significant reduction from the median values historically observed in similar transactions. This lower acquisition multiple offers a favorable scenario for PE investors, particularly in terms of return on investment. The reduction in the valuation multiples across the sector not only makes the investment more financially attractive but also could provide a cushion in the valuation going forward, enhancing the potential for multiple arbitrage. The return waterfall analysis in our study provides an insightful overview, focusing on how escalating exit multiples influence the MOIC and the IRR. However, we acknowledge that this assumption strongly relies on the underlying market conditions which are expected to improve with rate cuts expected for 2024.

Finally, the robust cash generation capability of CGM provides a solid baseline for considering innovative financing structures, such as the described unitranche loan combined with a delayed draw term loan or an M&A facility. This approach could strategically enable CGM to pursue larger-scale acquisitions, particularly targeting high-growth companies like Cegedim in France. Such acquisitions, with their significant operational and market synergies, would not only increase CGM's expansion in the European market but also potentially enhance both the MOIC and the IRR.

7. Conclusion

In conclusion, this thesis has elaborated the dynamics of LBOs, particularly in the context of the evolving PE sector and applied these insights to the analysis of CGM as a potential buyout candidate. The analysis underscores the vital role of operational strategies, financial structuring, and market positioning in the success of LBOs. CGM emerges as an exemplary LBO candidate, demonstrating the alignment of commercial viability, financial robustness, and strategic management expertise. Its strong performance in the healthcare and technology sectors, areas currently favored by PE for their resilience and growth prospects, increases its attractiveness for a potential LBO. Operational efficiencies and innovative capabilities of CGM, including its

acquisition of CareCloud, the expansion of the North American business and as well as operational improvements to boost margins, are identified as key levers for value creation post-acquisition. Especially in the current state of the economy, these aspects are crucial for servicing LBO debt and fostering long-term growth. The funding structure for the LBO incorporates the current market outlook and additionally, included a scenario of a potential private credit structure. The incorporation of sweet equity serves not only as a tool to align management's interests with those of the investors but also as a testament to the importance of human capital and industry expertise in the success of LBOs. The return outlook, while cautiously optimistic, is predicated on CGM's market strength, operational improvement potential, and strategic expansion opportunities. This scenario, however, remains sensitive to macroeconomic conditions and the complexities of integrating acquisitions. To conclude, this paper affirms that LBOs, when strategically aligned with operational excellence and attuned to market trends, present substantial opportunities for value creation, even in struggling market environments. The CGM case study exemplifies this, offering insights into how a strategically structured LBO can leverage a company's strengths for significant returns and set the stage for sustainable future growth.

Appendix

Appendix 1 – CGM’s International Competitive Positioning

	AIS	HIS	PCS
Market position	#1 in Germany, France, Austria, Czech Republic, Sweden, Denmark #2 in Italy, Belgium, Norway #3 in Slovakia, Netherlands #4 in US	#1 in Austria #2 in Germany, Sweden, Spain, Poland	#1 in Italy #2 in Netherlands #4 in Germany

Appendix 2 – Total Value Creation at Exit in 2023

	Amount (in EURm)
Equity at Entry	1,766.0
Total Fees	55.3
Equity at Exit	6,222.6
Total Value Creation	4,511.8

Appendix 3 – Value Creation Lever Excluding M&A

	Amount (in EURm)	MOIC
Multiple Arbitrage	0.0	0.0x
Revenue Growth	2,137.7	1.2x
EBITDA Margin Expansion	1,588.1	0.9x
Deleveraging	786.1	0.4x

Appendix 4 – Value Creation Lever Including M&A

	Amount (in EURm)	MOIC
Multiple Arbitrage	0.0	0.0x
Organic Revenue	1,651.3	0.9x
EBITDA M&A Add-On	622.9	0.3x
Organic EBITDA Margin	1,451.6	0.8x
Deleveraging	786.1	0.4x

Appendix 5 – Deep Dive Value Creation Lever Excluding M&A within AIS and CHS

	Amount (in EURm)	MOIC
AIS	881.3	0.5x
CHS	407.5	0.2x

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List of Abbreviations

AI	Artificial Intelligence
AIS	Ambulatory Information Systems
APV	Adjusted Present Value
BI	Business Intelligence
bps	Basis Points
CAGR	Compound Annual Growth Rate
CAPEX	Capital Expenditures
CCA	Comparable Company Analysis
CCF	Capital Cash Flows
CGM	CompuGroup Medical
CHS	Consumer and Health Management Information Systems
CTA	Comparable Transaction Analysis
DCF	Discounted Cash Flow
DD	Due Diligence
EBITA	Earnings Before Interest Taxes and Amortization
EBITDA	Earnings Before Interest, Depreciation & Amortization
EHR	Electronic Health Record
ERP	Enterprise Ressource Planning
EV	Enterprise Value
FCF	Free Cash Flow
FCFE	Free Cash Flow to Equity
FCFF	Free Cash Flow to the Firm
GP	General Practitioners
HIS	Hospital Information Systems
HR	Human Resources

ICP	Investment Committee Paper
IPO	Initial Public Offering
IRR	Internal Rate of Return
IT	Information Technology
LBO	Leveraged Buyout
LP	Limited Partner
LTM	Last Twelve Months
M&A	Mergers & Acquisitions
MOIC	Money on Invested Capital
NOPAT	Net Operating Profit After Taxes
PCS	Pharmacy Information Systems
PE	Private Equity
PIK	Payment in Kind
R&D	Research and Development
ROCE	Return on Capital Employed
ROE	Return on Equity
SaaS	Software-as-a-Service
SG&A	Selling, General & Administrative
TI	Telematics Infrastructure
WACC	Weighted Average Cost of Capital



CompuGroup Medical

Investment Committee Paper



January 2024

Charlotte Mayr, Wenzel Bayer, Marlin Egbuna, Justus Ferdinand Schroeder



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02	Market Environment
03	Historical Financials
04	Investment Thesis & Value Creation
05	Business Plan
06	Valuation, Capital Structure & Returns
07	Due Diligence & Exit
08	Appendix



CompuGroup Medical represents a remarkable investment opportunity delivering a MOIC of 3.5x at an IRR of 22.9% over a 5-year holding period

Company						Market					
- CompuGroup Medical (CGM) is a German healthcare IT firm focused on the development and distribution of end-to-end software products - The company is divided into four operating segments: i) Ambulatory Information Systems (AIS), ii) Hospital Information Systems (HIS), iii) Pharmacy Information Systems (PCS), and vi) Consumer and Health Management Information Systems (CHS) - Revenues have grown with a CAGR of 15.0% since 2018 and 64.6% (2022) of them are recurring resulting from software maintenance contracts - CGM serves a broad clientele, with around 400,000 customers spread across Europe and the US including doctors, hospitals, laboratories, pharmacies and end consumers	Key financials		2019A	2020A	2021A	2022A	Market Saturation		Sales cycles	Comp. environment	
	AIS		352.0	375.2	475.8	502.3	AIS			Shorter	Low specialization
	HIS		135.9	186.6	257.4	277.2		HIS			
	CHS		139.1	158.4	173.7	219.6	PCS				Longer
	PCS		116.7	116.8	118.2	130.5		CHS			
	Other		2.1	0.3	0.1	0.1	PCS				Shorter
	Total revenues		745.8	837.3	1,025.3	1,129.7		CHS			
	% YoY organic growth		(1.0)%	4.0%	5.8%	4.1%	CHS				Varying
	% YoY inorganic growth		5.0%	8.3%	16.6%	6.1%					
	EBITDA		178.1	197.5	213.4	216.4					
% margin		23.9%	23.6%	20.8%	19.2%						

Entry rationale

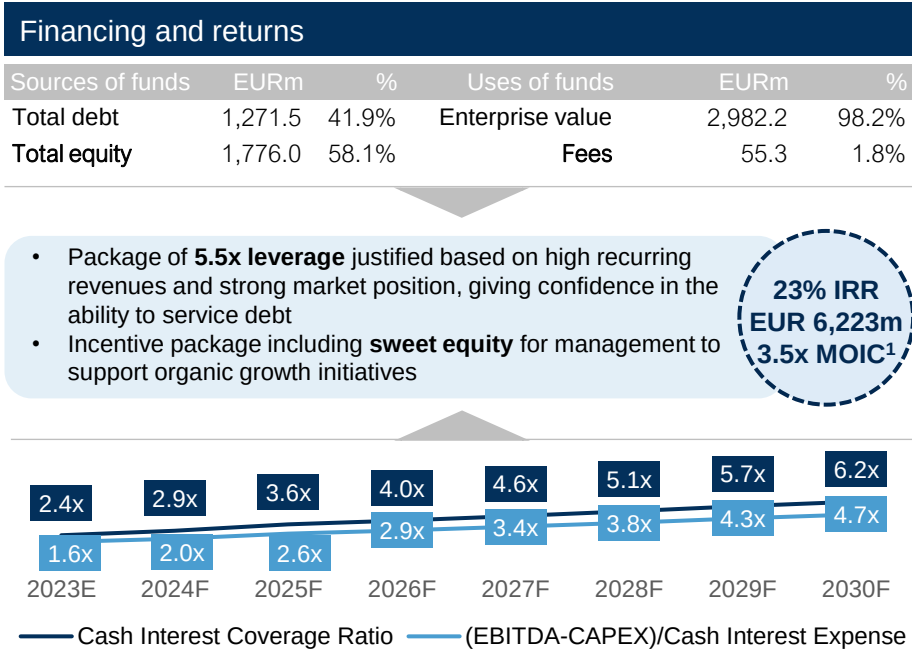
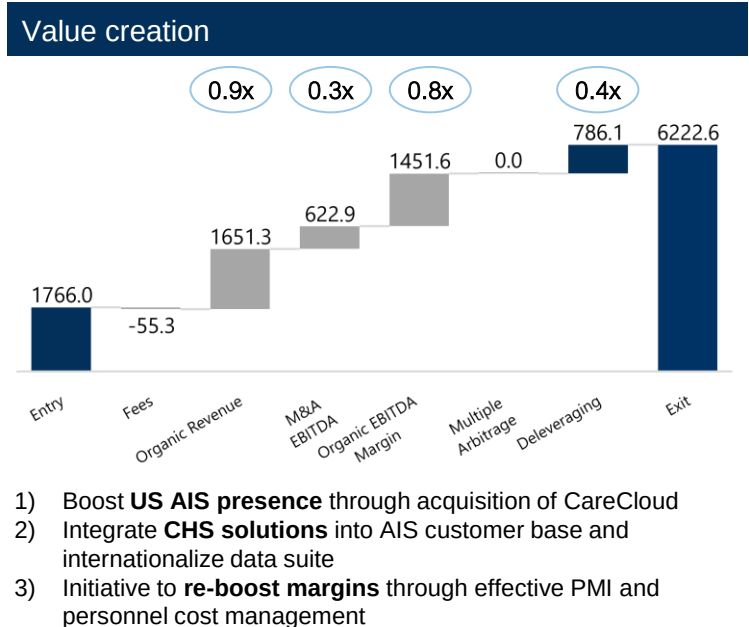
Entry at 12.9x EBITDA

CGM is an **international, market-leading, and healthcare industry-digitizing** company

Revenues are from **high-quality** due to **low macro sensitivity** additionally supported by **governmental funding**

A successful track record of **M&A target integration** and **business model expansion** aligned with current markets

Diversified, scalable, and sticky customer base with high share of **recurring revenues**



Sources: Company website
Notes: 1) Combined proceeds

01



Company Overview



CompuGroup is one of the leading healthcare IT companies – providing software, hardware, and additional services with 64.6% of recurring revenues delivering a historically strong EBITDA margin

Company description

- CompuGroup Medical ("CGM") is focused on the development and distribution of **end-to-end software products** and related IT services covering the **entire healthcare provider spectrum** mainly in Europe – especially in Germany (54% of sales), but also the US (11% of sales)
- The company is divided into **four operating segments**, according to client types and needs: i) Ambulatory Information Systems (**AIS**), ii) Hospital Information Systems (**HIS**), iii) Consumer and Health Management Information Systems (**CHS**), and vi) Pharmacy Information Systems (**PCS**)
- Revenues are generated through the sale of software licenses, software maintenance, professional services, sale of hardware, as well as advertising, eDetailing, and data
- Most revenues are recurring** (2022A: 64.6%), resulting from the contractual relationship of software maintenance contracts (all other products/services generate one-time revenues)
- Headquartered in Koblenz (Germany), CGM has offices in 20 countries worldwide, more than **9,200 employees** (of which ~2,700 are working in software development and maintenance)
- Ownership: listed on the Frankfurt Stock Exchange – the largest shareholders are the family of Founder and Chairman of the Administrative Board Frank Gotthardt (~46.3%) and Dr. Reinhard Koop (~3.7%)

Key financials (in EURm)

	2018A	2019A	2020A	2021A	2022A	CAGR L5Y
Revenues	717.0	745.8	837.3	1,025.3	1,129.7	12.0%
thereof recurring revenues	57.8%	61.8%	62.7%	65.0%	64.6%	
Capitalized inhouse services	18.5	24.6	31.9	37.3	44.8	24.7%
Other income	8.0	13.5	10.6	24.8	19.4	24.7%
Goods and services purchased	(151.4)	(139.0)	(156.2)	(191.4)	(216.4)	9.3%
Personnel expenses	(281.4)	(339.4)	(377.1)	(497.7)	(546.7)	18.1%
Other expenses	(122.9)	(127.3)	(149.0)	(184.8)	(214.5)	14.9%
EBITDA	187.8	178.1	197.5	213.4	216.4	3.6%
% margin	26.2%	23.9%	23.6%	20.8%	19.2%	
Depreciation and amortization	(44.6)	(62.9)	(75.7)	(110.7)	(112.3)	26.0%
EBIT	143.2	115.3	121.8	102.7	104.0	(7.7)%
% margin	20.0%	15.5%	14.5%	10.0%	9.2%	

Business overview, market positions and revenue share 2022A (in %)

Segment	Customers	Sources of revenue ¹	Strong presence in Europe and the US
44.5% AIS	Smaller primary care providers Larger medical facilities	Software licences 7.3% Software maintenance² 64.6% Professional services 11.0% Hardware 9.7% Advertising, eDetailing & data 6.2%	
24.5% HIS	Highly specialized primary and secondary care facilities		
11.6% PCS	Pharmacies		
19.4% CHS	Pharma companies Health insurers Patients/Consumers		

Key management

Michael Rauch | CEO (since 05/2023), CFO (since 09/2019) and Member of the Administrative Board
Prior: CFO at private equity-owned perfumery Douglas (2017–2019) | Held various finance and strategy functions at Henkel Group, including CFO for Adhesives Technologies and Beauty Care (2001–2016)

Emanuele Mugnani | Managing Director AIS Europe (since 02/2022)
Prior: Various management positions at CGM (2014–2022) | Managing Director Italy at Micros Systems (acquired by Oracle in 2014), a global leader in IT solutions for retail and hospitality (2006–2013)

Dr. Eckart Pech | Managing Director CHS (since 06/2020)
Prior: Leading management roles at Allianz Group, including Board Member for Allianz Technology SE in charge of the Allianz Group’s global IT platforms (2014–2019) | CIO³ at Telefonica DE (2011–2014)

Hannes Reichl | Managing Director Inpatient and Social Care (since 06/2020)
Prior: Various management positions at CGM, including Senior VP and Board Member, building up the CEE & ME region and focusing on PMI⁴ (2007–2020) | Manager and later CEO at Systema⁵ (1998–2007)

Dr. Ulrich Thomé | Managing Director AIS DACH (since 08/2023)
Prior: CSO⁶ at online pharmacy DocMorris (2021–2023) | Board Member for eHealth company ARZ Haan⁷ (2018–2021) | Held various management positions at BFS health finance (2007–2018)

Sources: Company information | Revenue share 2022A, Market position AIS, Market position HIS, Market position PCS
Notes: 1) Excluding "Other revenues" (1.2%); 2) and other recurring revenues; 3) Chief Information Officer; 4) Post-Merger Integration; 5) Austrian eHealth company acquired by CGM in 2007; 6) Chief Strategy Officer; 7) Strategic partner of CGM in the expansion of the telematics infrastructure



AIS leads in revenue generation, dominating the largest segment of recurring income, while HIS and CHS show promising growth prospects in recurring revenue streams

Overview of business segments

	Description	Nature of revenue	Revenues 2019A-2022A (in EURm)
Ambulatory Information Systems (AIS)	- Focus on practice management software - End-to-end solution covering all clinical, administrative, billing-related functions - Internet and Intranet solutions ensuring safe patient data sharing	76.8% High share of recurring revenues due to maintenance and other recurring revenues as the main source of revenue Revenue realization usually fast due to short decision-making and sales processes of the customer base	33%31%25%26% 12.6% 352.0375.2475.8502.3
Hospital Information Systems (HIS)	- Clinical and admin solutions for in- and outpatient sector - For example: resource, personnel, and financial management as well as medical-care documentation - Full-service, customized, and integrated software, supporting across, between and within various specialist departments (e.g., laboratory and radiology)	Upside68.5% - Software maintenance and other recurring revenues contributing to a substantial portion of recurring income - Revenues more project-based due to longer decision cycles of largely publicly managed hospital customer base	14%16%17%9% 26.8% 135.9186.6257.4277.2
Pharmacy Information Systems (PCS)	- Focus on integrated administrative and billing-related software applications for pharmacies - Tools for: a) Decision-making support b) Supply chain and inventory management c) Planning, performing, and monitoring of retail activities	64.3% - Pharmacies with similar features to AIS clientele (fast decision-making cycles and installation periods) High portion of recurring revenue, fast revenue realization within long-term client relationships	26%29%29%30% 3.8% 116.7116.8118.2130.5
Consumer and Health Management Information Systems (CHS)	- Broad portfolio of data-based products a) Software interfaces for data exchange b) Portals for retrieving relevant outpatient data to medical decision support tools c) Consumer portals, apps and security solutions - Also includes the telematics infrastructure business	Upside32.0% - Revenues from cooperation agreements, data collection and brokerage contracts, and technical support - Additionally, project- and performance-based revenues - TI revenues based on hardware sales and linked services	Growth Opportunity27%31%23%19% 16.4% 139.1158.4173.7219.6

Sources: Company information
Notes: Recurring revenues (revenue share in 2022A), EBITDA Margin



Robust recurring revenue streams are driven by solid software maintenance contracts, the primary driver of recent revenue growth – data related revenues are emerging as a rapidly growing and promising financial avenue

Overview of revenue streams

	1	2	3	4	5
	Software licenses	Software maintenance and other recurring revenues	Professional services	Hardware	Advertising, eDetailing & data
Description	- Sale of software licenses, entitling the customer to permanent use of the software without usage-based billing - Only extensions trigger further license payments	- Contracts granting clients access to software updates - Minimum contract terms and cancellation periods vary by product line - If not cancelled, contracts usually automatically extend by a further 12 months	- Services remunerated on an hourly basis or at contractually fixed rates - Include e.g., system configuration, training or customer-related programming	- Sale of hardware and infrastructure components, such as PCs, servers, monitors, switches, racks, etc. - Trade only (except for connectors which are manufactured in-house)	- Paid advertising and communication services via software or other media - Revenues from services supporting the sales process of pharma companies - Collection, structuring, and provision of data for healthcare providers
Nature of Revenue	Usually, one-time fees, which normally are deferred over the minimum contractual term of the maintenance agreement	Pro-rata recognized revenues from maintenance contracts (over the period in which the services are rendered)	Revenue recognition at rendering of the service or within the framework of contracts using the percentage-of-completion method	Recognition immediately upon delivery or based on the project's overall completion if hardware is part of the software implementation contract	- Revenue recognition of continuing obligations on a pro-rata basis throughout service rendering - Hourly billed services recognized upon delivery
Revenues 2019-22A (in EURm)	1x 15.4% 53.758.186.982.4	1x 16.6% 460.8524.7666.5729.9	1x 9.0% 95.799.1108.0124.0	1x 5.9% 92.6115.1111.0110.0	1x 27.0% 34.337.243.270.2

Sources: Company information | Recurring revenues, One-time revenue



With more than 50 versatile and customizable software solutions along the entire patient journey, CGM caters to a large customer base of approximately 400,000 clients in both Europe and the US

Product portfolio¹ (excerpt)

AIS

CGM MEDISTAR

Basic, multi-functional physician software with all the functionalities required in everyday practice

Other software, among others, are CGM M1 PRO, distinguished by its high performance, or CGM XDENT, specializing on dental practices

US

CGM APRIMA as core software can be expanded by add-on pro-ducts for e.g., telemedicine or RCM²

HIS

CGM CLINICAL

New holistic, modular, and process-oriented HIS generation based on CGM's concept of nonstop healthcare: scheduling, resource planning, logistics processes, HR mgmt., finance & control-ing, billing, business intelligence & quality mgmt., patient data mgmt.

US

Hospital solutions focus on reimbursement, telemedicine, and remote patient monitoring

PCS

CGM LAUER

Pharmacy organization such as inventory management, price- and drug information, staff administration, rights assignment, or invoicing

Pharmacy management, e.g., reports and analyses as well as interlinking of individual locations of pharmacy networks

Courier services, e.g., route optimization and real-time tracking

CHS

CLICKVDOC INSIGHTHEALTH

Main goal is to build a pan-European health data intelligence suite which also provides a basis for data-driven enhancements of other segments

Focus on big data collection, analytics, and solution communication (e.g., CGM clinical studies or rare disease finder); patient, disease and medicine data injection & extraction; telehealth (e.g., through Click-Doc); and TI advancements (in Germany)

Customer base (Europe)

Physician practices

Dental practices

Hospitals

Rehabilitation centres

Social institutions

Pharmacies

Laboratories

Special services (e.g., physiotherapists, midwives)

Patients

Pharma and insurance companies

Customer base (US)

Doctors

Hospitals

Laboratories

Billing services

Community health

Schools

Present in over 40 countries and a customer base of around 400,000 health institutions and 1.6m professional users worldwide, CGM boasts one of the largest reach among service providers

Case study – CGM's value creation along the entire patient journey

Examples for applications of CGM's products

Appointment booking, and medical consultation via video through e.g., ClickDoc

Appointment scheduling through CGM's practice management systems

Practice management systems to support medical diagnosis based on saved patient history

Administrative add-on modules

Pharmacy management systems to streamline the process of medication procurement

E-prescription through TI as well as telemedicine

Hospital information systems and customized add-on modules to accelerate e.g., appointment scheduling and telemonitoring

Hospital information systems to support EHR data transfer across departments, digitalization of endoscopic processes, and medical diagnosis

(Extensions of) hospital and ambulatory information systems to enhance e.g., therapy planning for post-diagnosis health institutions such as physiotherapists

Sources: Company information
Notes: 1) Some software can be applied across segments 2) Revenue cycle management

NOVA Confidential information

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02

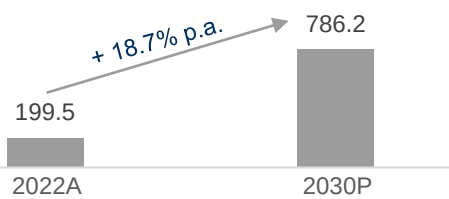


Market Environment

Global healthcare IT market: The demand for healthcare services is increasing, and digital solutions are becoming more widely available in both the private and public sectors – growth is supported by government initiatives to digitize services

Global IT healthcare market

Global healthcare IT market (\$ bn)



Trends

- Growing availability/affordability of healthcare
- Aging population
- Shortages in healthcare personnel
- (Public) cost pressures
- Application of subscription models
- Cloud-based and interoperable software
- “Datafication”, “customerization”

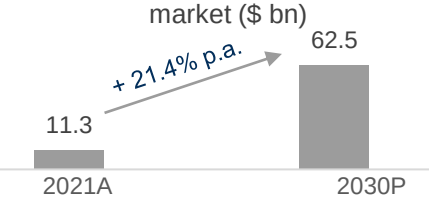
Drivers

- New regulatory requirements
- Software upgrades and international up- and cross-selling
- Price increases
- Demand for updates of outdated traditional IT systems
- Development of new applications

With **little growth from the addressable market**, effective **up- and cross-selling** and maintaining **pricing power** through **quality offering** as crucial prerequisites for competitive advantages

Trend towards “cloudification”, subscription and SaaS

Global healthcare cloud computing market (\$ bn)



Traditional revenue model

One-time license fee + (optional) recurring maintenance fees

VS

Cloud-based, SaaS model

Recurring obligatory fee¹ for the software and related updates/services

Advantages of SaaS subscription models

- Higher predictability of cash flows
 - Opportunity to convert non-maintenance, legacy license customers into subscription customers
 - Amplified cross- and up-selling potential from more regular customer interaction
- for providers
- Lower up-front capex reducing entry barriers for health institutions
 - More frequent updates and schedulable service/interaction for customers
- for customers

CGM has relatively low exposure to subscription and SaaS-based revenues comprising only c. 5% of the total

Medium- and long-term growth potential

2027

Withdrawal of SAP ERP industry solution

40k organizations to migrate

2030

Discontinuation of SAP's support for Oracle Cerner's HIS software, one of CGM's main competitive products in the EHR product line

At the same time, **CGM is cooperating with SAP** to build an interface to integrate its AIS and HIS **Revenue Cycle Management** solution into SAP
→ Opportunity for **facilitated customer acquisition**

Digitalization funding programs

German Hospital Futures Act (KZHG)

- EUR 4.3bn in funding especially towards hospital digitization

French Sègur de la Santé

- EUR 2bn healthcare plan aimed at digitization of medical practices

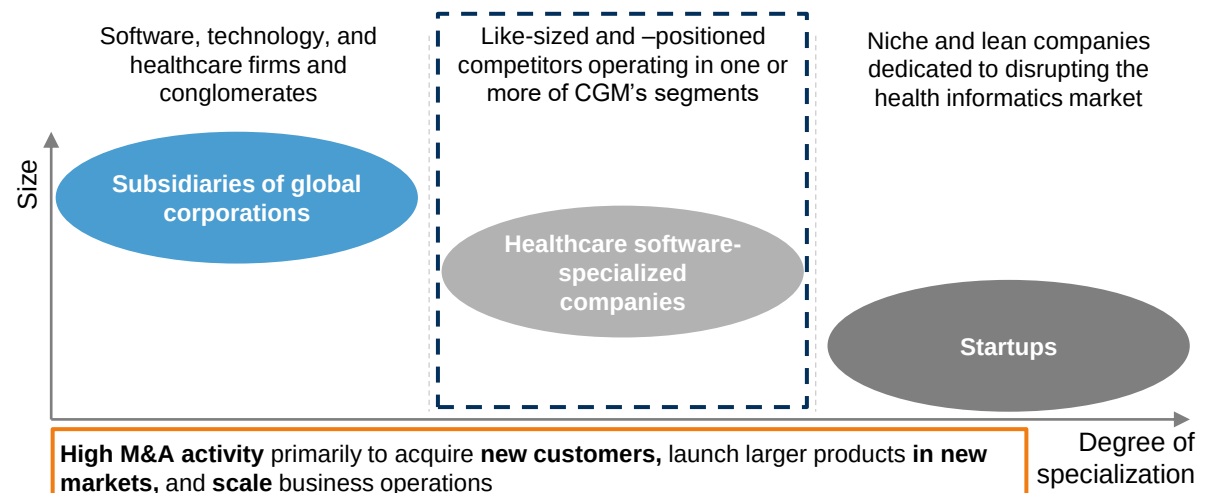
Italian Recovery and Resilience

- EUR 2.4bn dedicated to the development of telemedicine and EHR infrastructure

European Commission

- eHealth program working to provide citizens with access to safe and digital services in health and care

Competitive dynamics

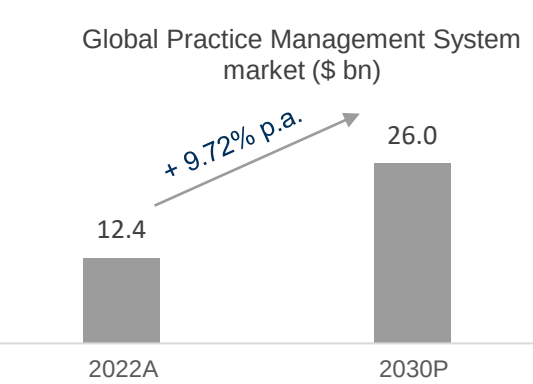




AIS deep dive: With its extensive, modular software suite and market leadership in the DACH region, CGM is strategically poised to leverage cross- and upselling opportunities – the expansion of its cloud-enabled software offerings stands as a pivotal next move

Ambulatory Information Systems, often referred to as Practice Management Systems, are comprehensive systems designed to **assist healthcare and medical practices** in optimizing their **day-to-day operations** by offering various **streamlining tools** including the organization of patient records, appointment scheduling, and efficient billing

CGM's addressable AIS market



- Trends**
- Accelerated upgrading/adoption of IT systems in **physician offices** and diagnostic laboratories in the course of the pandemic
 - Rising **wholesale prices, administrative work,** and shortages of **skilled staff**
 - Patients' demand for **high-quality, real-time care**
 - Large amounts of data** that must be handled securely and the **advancing IT penetration**
 - German market rather saturated with growth (2-4% p.a.) coming from **up-selling** and **price increases**

Growth Drivers

Rather saturated market with high entry barriers driven by stickiness of the customer base
Growth mainly fueled by:

- Cross-/up-selling**
- Price increases**

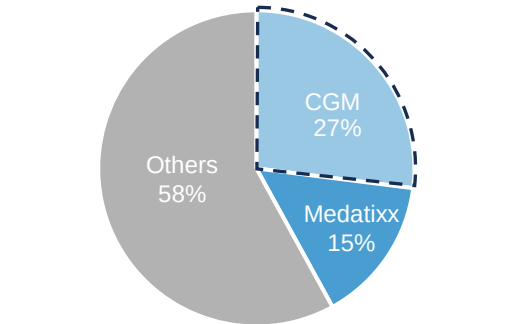
Competitive dynamics and nature of sales cycles

- Top players with significant market shares
- Market tails fragmented with a lot of smaller, regional niche providers
- System switches to cloud-based software might lower entry barriers by inducing customers to switch to cloud-native market participants**

Short sales cycles

- No public tender processes
- Small ticket sizes
- Usually, customer = buyer = user
- Short implementation times

AIS market shares in Germany



While the top two or three players in most segments hold ~50% market share, the market tail is usually fragmented, favouring consolidation through M&A-activity

CGM's leading market positions in DACH core regions²⁾

	Market position/share	Customers	Market position/share	Customers
GPs¹⁾ 	#1 >40%	64k	#1 >40%	40k
Dentists 	#1-2 >25%	20k	n.a. n.a.	n.a.
Therapists & Nurses	n.a. n.a.	n.a.	#1 >25%	>50k

CGM's competitive advantages

1 Comprehensive software offering

accommodating various practice types (e.g., dentists, physicians) and allowing for seamless integration of additional software components to build fully tailored PMS

2 Cross- and upselling potential

resulting from CGM's large and diverse customer base as renowned market leader in the DACH region paired with its customizable product portfolio

3 Fore runner position

underpinned by CGM's recent announcement to integrate AI-based CHS business solutions into AIS software to further benefit practices with admin work streamlining

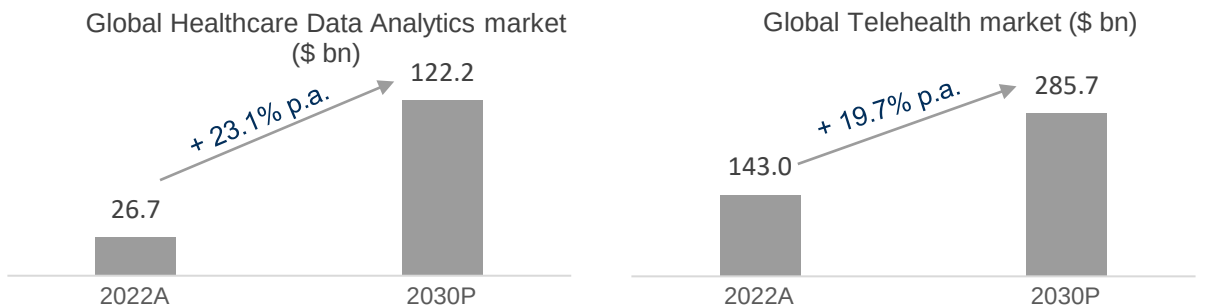
Sources: Company Information, Kassenärztliche Bundesvereinigung, Talkinghealthtech, Grand View Research, BNP Paribas
Notes: 1) General practitioners, 2) Excerpt, CGM is also AIS market leader in Austria, Czech Republic, Sweden (2,200 customers), and Denmark (5,500 customers)



CHS deep dive: Emerging trends in customization and telehealth, alongside Germany's TI 2.0 rollouts, are expanding CGM's potential in the CHS market – CGM's distinct data access advantage aligns seamlessly with the market's shift toward data-centric healthcare solutions

CGM's Consumer & Health Management Information Systems business unit comprises the development and sale of **intelligent data-based products** for pharmaceutical companies, health insurance companies as well as patients and **spearheading** the development and **implementation of TI products**

Global telehealth and healthcare data analytics markets



CGM's early entry into these markets and its strategic decision to increasingly focus on these segments (recent acquisitions of INSIGHT Health and m.Doc to advance health data business, and telehealth-focused app ClickDoc, respectively) demonstrate the company's ability to anticipate and capitalize on market developments

Increasing customerization and customization will expand the CHS market



Opportunity for CGM
Patients and consumers are becoming **more receptive to personalized and technology-backed health initiatives**, creating ideal opportunities for CGM's consumer-focused CHS business

Market saturation

Growth Drivers

Emerging and constantly evolving unsaturated markets

Growth driven by:

Customer uptake

New applications

Competitive dynamics and nature of sales cycles

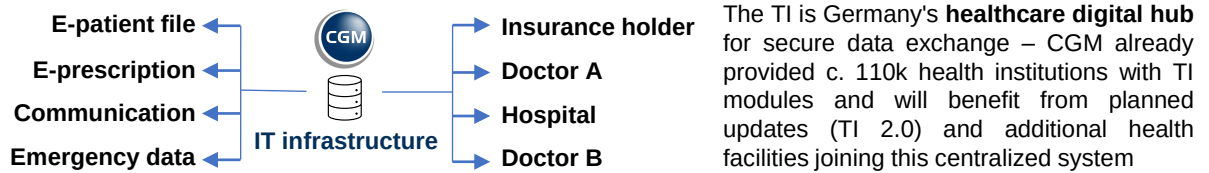
Competition fiercer due to:

- Continuous emergence of new players focusing on specific subsegments only (e.g., Doctolib specializing in telehealth)
- Switching costs low in comparison to other segments

Sales cycles volatile and depending on the specific niche area which they are generated in (e.g., data collection/brokerage, hardware sales and implementation)

Varying sales cycles

Further expansions of Germany's Telematics Infrastructure (TI) to boost revenues



CGM's competitive advantages

1

Unique data access

CGM's access to the most comprehensive outpatient data sources¹⁾ builds an unmatched foundation for big data analytics

2

Cross-selling potential

With its existing customer base of 400k, CGM can effectively promote its CHS solutions between segments through cross-selling

3

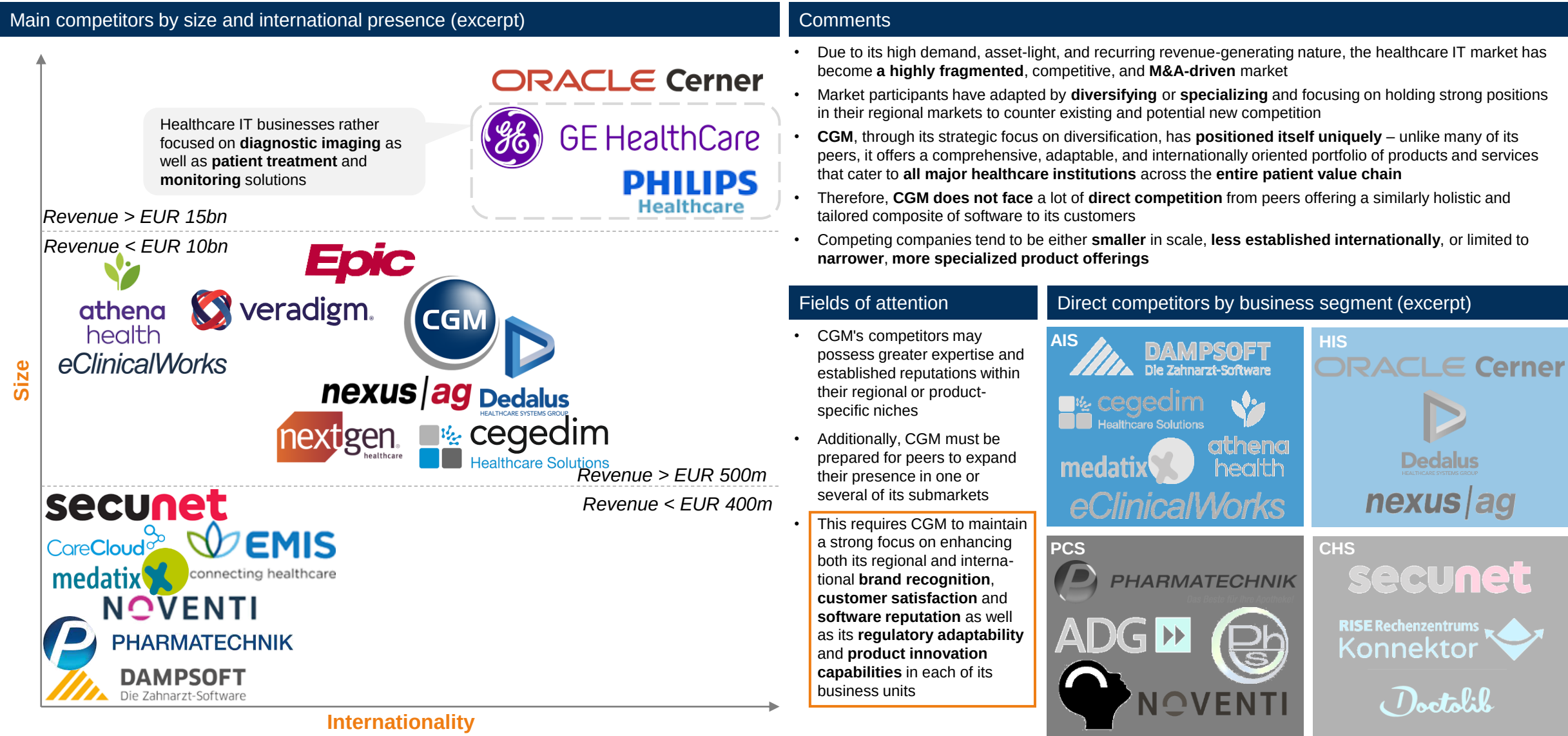
Fore runner position

Click-Doc, as one of the first apps, achieved certification as a video consultation provider by all major accreditation institutions in mid-2022

Sources: Company Information, BNP Paribas, Fortune Business Insights, Verified Market Research
Notes: 1) Ranging from clinical and ambulatory to pharmacy, insurance, and wholesale data



In the healthcare IT market packed with fragmentation and niche players catering to specific regions or products, CGM distinguishes itself as a comprehensive, global provider offering an all-encompassing suite of software solutions



Sources: Capital IQ, Zippia, Dedalus, BNP Paribas, Parata, Signify Research

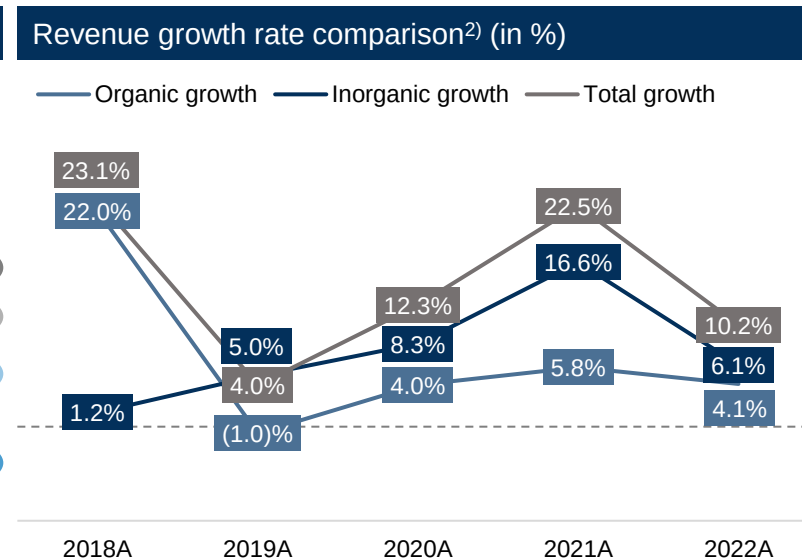
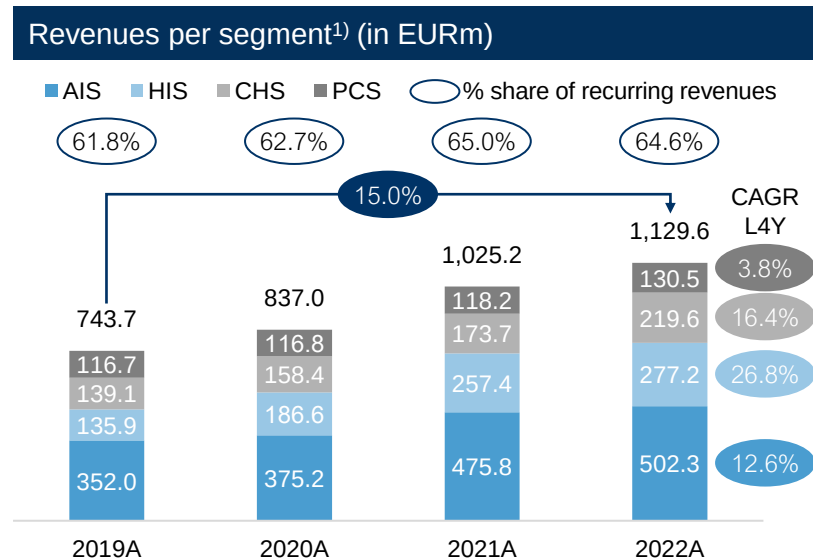
03



Historical Financials

In the last five years, revenues have grown strongly with a CAGR of 12.0%, and the share of recurring revenues increased from 57.8% to 64.6% – most of the topline growth has been inorganic due to CGM's strong M&A expansion

Profit and loss statement I/II (in EURm)							Description
	2018A	2019A	2020A	2021A	2022A	CAGR L5Y	
1 Software licenses	53.6	53.7	58.1	86.9	82.4	11.3%	1 In recent years, software licenses had a rather small revenue share (>10.0%) and grew slower than total revenues (CAGR _{18A-22A} : 11.3%)
2 Software maintenance and other recurring revenues	414.7	460.8	524.7	666.5	729.9	15.2%	Significant increase in 2021 (YoY growth: 49.5%) primarily driven by M&A – particularly by the acquisition of eMDs Inc., who mainly provide ambulatory information systems (revenues 2020/21A: EUR 81m) Key revenue driver over the last five years (CAGR _{18A-22A} : 15.2%), and the revenue share grew from 57.8% to 64.6% Growth in revenue share was driven by AIS and HIS, as the growth in recurring revenues exceeded the growth in total revenues respectively Especially the HIS segment contributed strongly to growth (CAGR _{19A-22A} : 33.7%), which was primarily driven by M&A (e.g., acquisition of the IT healthcare portfolio of Cerner Corporation for EUR 204m in 2020)
Professional services	96.9	95.7	99.1	108.0	124.0	6.3%	
3 Hardware	112.1	92.6	115.1	111.0	110.0	(0.5)%	
4 Advertising, eDetailing and data	30.6	34.3	37.2	43.2	70.2	23.1%	
Other revenues	9.0	8.7	3.1	9.7	13.3	10.0%	
Total revenues	717.0	745.8	837.3	1,025.3	1,129.7	12.0%	Growth in revenue share was driven by AIS and HIS, as the growth in recurring revenues exceeded the growth in total revenues respectively Especially the HIS segment contributed strongly to growth (CAGR _{19A-22A} : 33.7%), which was primarily driven by M&A (e.g., acquisition of the IT healthcare portfolio of Cerner Corporation for EUR 204m in 2020)
% YoY organic growth	22.0%	(1.0)%	4.0%	5.8%	4.1%		
% YoY inorganic growth	1.2%	5.0%	8.3%	16.6%	6.1%		
5 Capitalized inhouse services	18.5	24.6	31.9	37.3	44.8	24.7%	
Other income	8.0	13.5	10.6	24.8	19.4	24.7%	



With the roll-out of TI in 2018, hardware sales increased by 176.6% YoY to EUR 112.1m – since then, they have remained almost stable, apart from a one-off drop in 2019 due to declining hardware sales in telematics implementation (other segments remained largely on track)

4 Revenues in advertising, eDetailing and data are almost completely attributable to the CHS segment (2022A: 98.3%)

With acquisitions of INSIGHT Health Group (100%) and the Italian New Line RdM Società Benefit (20%) in 2022, CGM strengthened its position in data-driven solutions and revenues rose YoY by 62.5%

5 Includes capitalized expenses for internally generated software, which are measured at directly attributable production costs

From 2018 to 2022, growth has been 24.7% p.a. – most of which was due to an increase in hours worked (CAGR_{18A-22A}: 15.4%) – and the share in total revenues rose from 2.6% to 4.0%

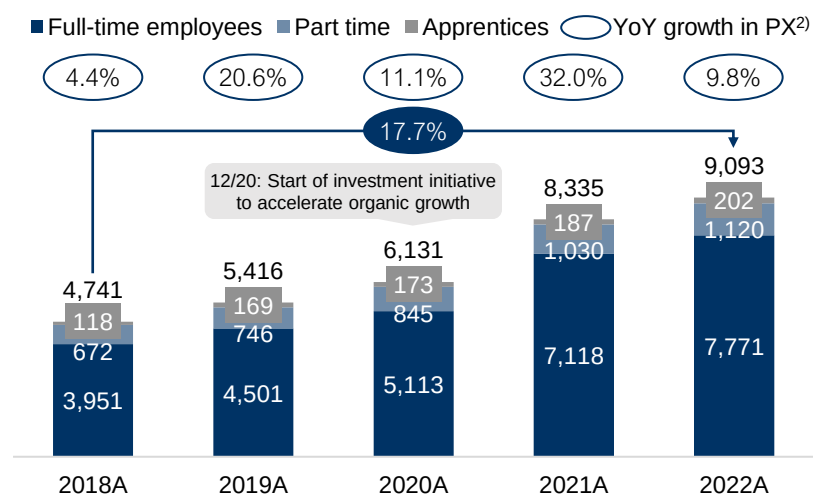
Sources: Company information

Notes: 1) Excluding the segment "Other"; 2) Organic growth is defined as the YoY increase in sales revenue, adjusted for sales revenues from companies consolidated for the first time in the reporting period or from companies consolidated for the last time in the same period of the previous year

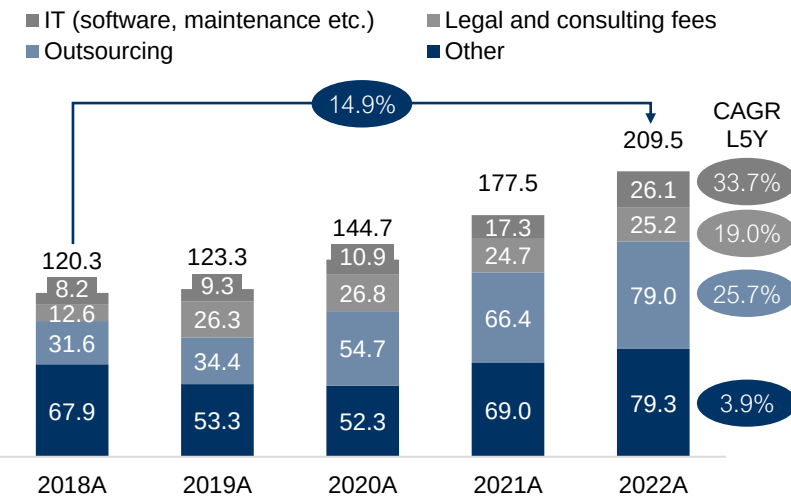
Given the M&A strategy and significant investments in the company, personnel and other operating expenses in particular rose sharply, which has put pressure on the EBITDA margin, falling by 7.0ppt since 2018 but are slowly normalizing

Profit and loss statement II/II (in EURm)							Description
	2018A	2019A	2020A	2021A	2022A	CAGR L5Y	
1 Expenses for goods and services purchased	(151.4)	(139.0)	(156.2)	(191.4)	(216.4)	9.3%	1 Considered as COGS (e.g., costs for service providers operating the service hotline); have grown almost linearly with total revenues resulting in a constant gross profit margin of c. 81% (2019A-2022A)
2 Personnel expenses	(281.4)	(339.4)	(377.1)	(497.7)	(546.7)	18.1%	2 Fighting in a war of talents, M&A has been a good way of attaining qualified employees at lower cost – in the last five years, most employee additions came from acquisitions (c. 3,000 employees) Average cost per employee has not increased much since 2018 (2018A: EUR 59.4k vs. 2022A: EUR 60.1k, CAGR _{18A-22A} : 0.3%), mainly resulting from lower cost acquisitions (i.e., CGM's Cerner assets) However, employee growth (CAGR _{18A-22A} : 17.7%) and a resulting rise in personnel expenses (CAGR _{18A-22A} : 18.1%) – which grew faster than total revenues – put pressure on profitability margins
Net impairment losses on financial and contract assets	(2.6)	(4.0)	(4.3)	(7.4)	(5.0)	18.0%	
3 Other expenses	(120.3)	(123.3)	(144.7)	(177.5)	(209.5)	14.9%	
Adjustments ¹⁾	(5.6)	20.0	17.3	10.7	17.6	n/a	
4 Adjusted EBITDA	182.5	198.1	214.9	224.3	234.0	6.4%	3 Other expenses have been the second key cost driver since 2018; in 2022 other expenses primarily consisted of outsourcing (2022A: 37.7%), IT (2022A: 12.5%) and legal/consulting fees (2022A: 12.0%)
% margin	25.5%	26.6%	25.7%	21.9%	20.7%		
EBITDA	187.8	178.1	197.5	213.4	216.4	3.6%	
% margin	26.2%	23.9%	23.6%	20.8%	19.2%		
Depreciation of PP&E and right-of-use assets	(11.4)	(28.5)	(30.9)	(37.8)	(42.8)	39.1%	4 Adjusted EBITDA ¹⁾ margins remained relatively stable at c. 21-22% from 2012 to 2017; in 2018 margins were boosted by the TI roll-out (c. 20% boost of revenues) increasing to 25.5% In 2021, CGM started to invest more heavily into R&D (expenses up from EUR 153m to EUR 203m in 2021) and sales, which led to a margin decline of 5ppt to 20.7% in 2022 We also note that capitalized inhouse services increased from 1.8% of total revenues in 2018 to 4.0% in 2022 – key investments since 2020 include for example the new G3 platform ³⁾ and ClickDoc
Amortization of intangible assets	(33.2)	(34.3)	(44.9)	(72.9)	(69.6)	20.3%	
5 EBIT	143.2	115.3	121.8	102.7	104.0	(7.7)%	
% margin	20.0%	15.5%	14.5%	10.0%	9.2%		

Workforce



Other expenses

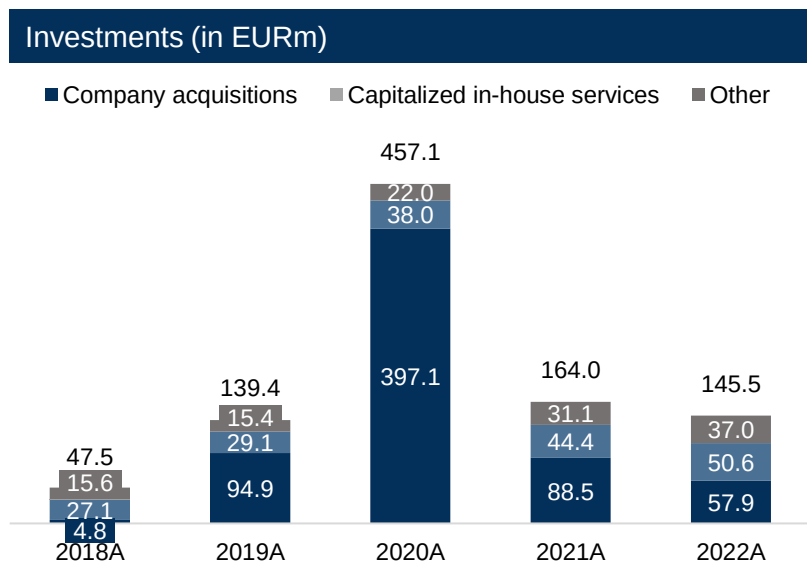
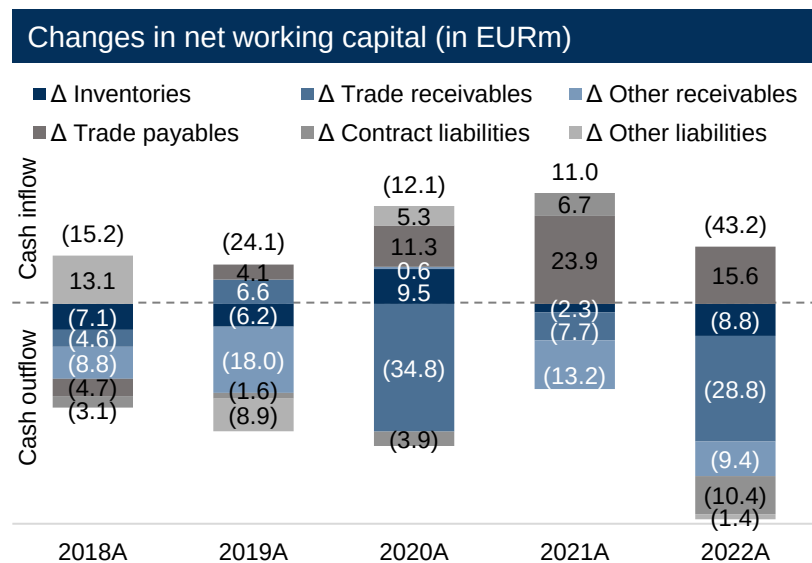
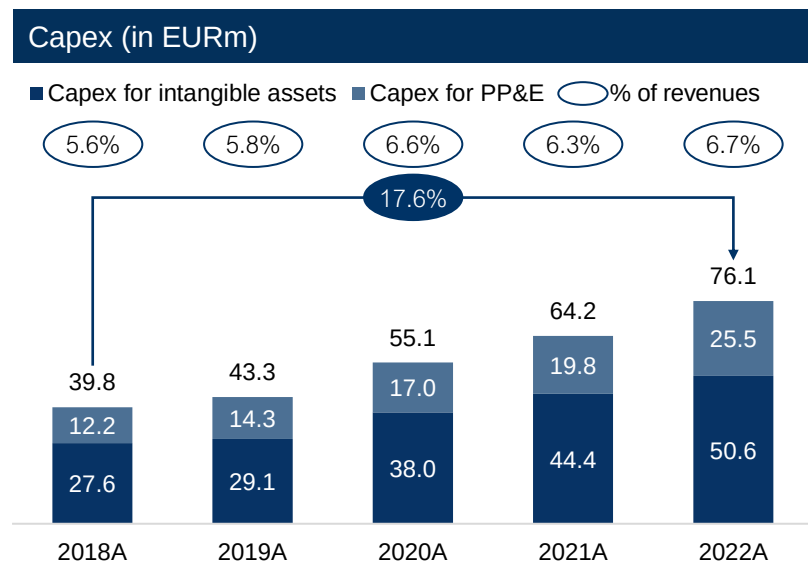


Sources: Company information

Notes: 1) Adjustments include costs/revenues related to M&A transactions, restructuring programs, share-based option programs, and other non-operative, extraordinary or one-time effects; 2) Personnel expenses; 3) CGM Medical for hospitals replacing the old Cerner software Medico/Soarian

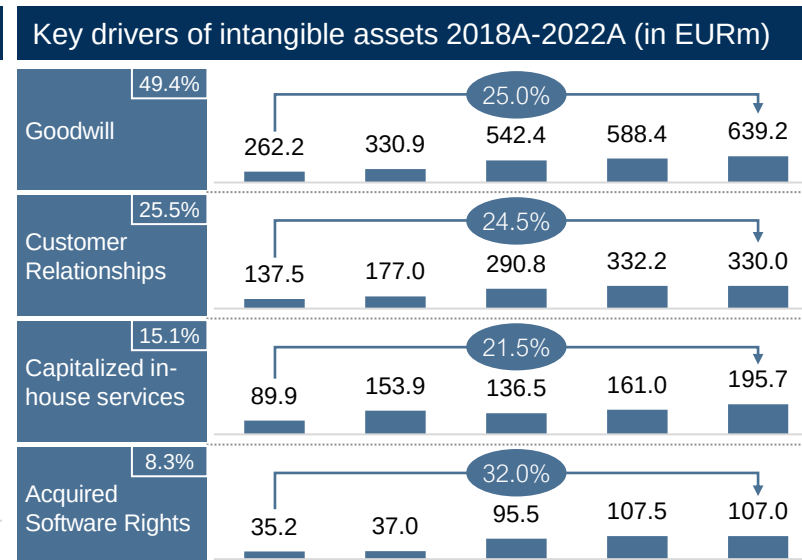
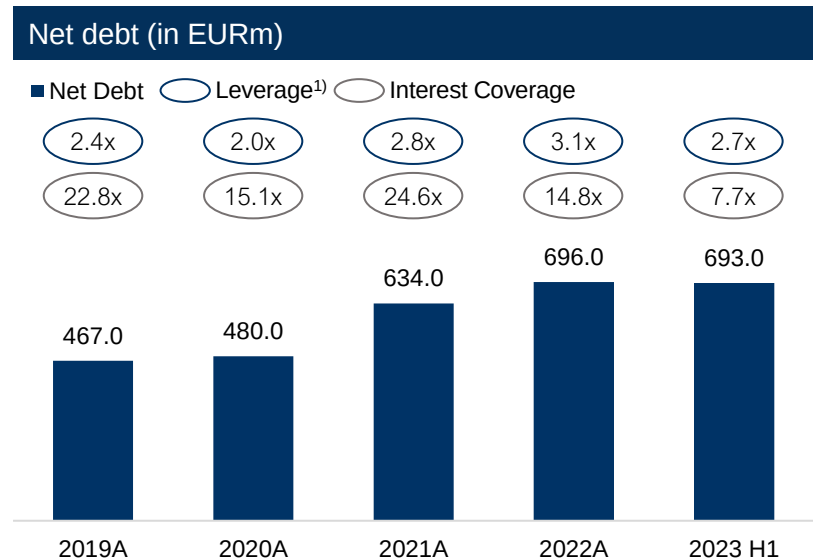
Alongside the decreasing EBITDA margin, changes in NWC and Capex (primarily for intangible assets) rose sharply resulting in both having a significant impact on the free cash flow development in recent years

Free cash flow development (in EURm)							Description
	2018A	2019A	2020A	2021A	2022A	CAGR L5Y	
EBITDA	187.8	178.1	197.5	213.4	216.4	3.6%	1 Since 2018, NWC increased (except for 2021 given an increase in trade payables of EUR 23.9m) – primarily driven by increases in trade receivables and income tax receivables (other)
Interest expenses	(8.8)	(5.7)	(10.4)	(4.8)	8.1	n/a	
Taxes	(37.8)	(41.6)	(37.0)	(28.8)	(32.7)	(3.5)%	
1 Changes in NWC	(15.2)	(24.1)	(12.1)	11.0	(43.2)	29.8%	2 The increase in Capex (CAGR _{18A-22A} : 17.6%) was primarily driven by investments in intangible assets, more specifically by capitalized inhouse services (2022: EUR 46.3m, CAGR _{18A-22A} : 24.7%)
Other cash-effective items	10.6	5.6	12.9	(25.5)	(2.8)	n/a	
Operating cash flow	136.6	112.3	150.9	165.2	145.8	1.6%	3 FCF is highly fluctuating from EUR ~70m to ~100m (mainly influenced by changes in NWC and Capex); FCF conversion is almost only driven by FCF since EBITDA is barely increasing (CAGR _{18A-22A} : 3.6%)
2 Capex	(39.8)	(43.3)	(55.1)	(64.2)	(76.1)	17.6%	
3 Free Cash Flow	96.8	68.9	95.8	101.1	69.8	(8.1)%	
% FCF Conversion	51.5%	38.7%	48.5%	47.4%	32.2%		



Growth in total assets was primarily due to the increase in goodwill, customer relationships and capitalized inhouse services, which rose as part of the business acquisitions – mainly financed by the sale of treasury shares and a credit facility of EUR 1,000m

Balance sheet (in EURm)							Description
Assets	2018A	2019A	2020A	2021A	2022A	CAGR L5Y	
1 Intangible assets	536.5	668.3	1,088.1	1,214.3	1,293.9	24.6%	1 Key driver of intangible assets are goodwill (2022A: 49.4%), customer relationships (2022A: 25.5%) and capitalized inhouse services (2022A: 15.1%), which in turn were driven by M&A In 2020, especially goodwill (YoY growth: 63.9%) and acquired software rights (YoY growth: 158.2%) increased as a result of M&A
Property, plant and equipment	83.7	88.1	91.7	100.1	107.5	6.5%	
2 Trade receivables	105.6	103.0	137.2	147.2	189.4	15.7%	
3 Cash and cash equivalents	25.3	46.4	75.9	107.3	90.5	37.5%	
Other	97.2	160.1	172.8	221.8	263.1	28.3%	
Total	848.3	1,065.9	1,565.8	1,790.8	1,944.4	23.0%	2 In the last five years, the share of trade receivables on revenues has been quite stable at c. 14% of total revenues The sharp growth in 2020 (YoY growth: 33.2%) and 2022 (YoY growth: 28.7%) was driven by M&A and billing-related reasons, respectively
Equity and Liabilities	2018A	2019A	2020A	2021A	2022A	CAGR L5Y	
4 Equity	263.8	259.9	638.9	612.3	673.8	26.4%	
5 Total liabilities to banks	308.4	449.6	496.4	674.9	728.5	24.0%	
Trade payables	39.3	47.1	64.5	93.2	112.6	30.1%	
Contract liabilities	34.0	42.5	63.9	79.1	66.9	18.5%	3 In 2019 to 2021, cash and cash equivalents rose primarily through the placement of treasury shares (2020) and M&A – the decline in 2022 of (15.7)% was mainly due to the EUR 31.3m YoY decrease in FCF 4 In 2020, Equity increased by 145.8% YoY largely due to the placement of treasury shares (2019A: 9.0% of share capital) resulting in gross issue proceeds of EUR 307.6m and a capital increase of EUR 32.7m After a decrease of (4.2)% in 2021 – primarily driven by a share buy-back program that reduced equity by c. EUR 99m – equity recovered in 2022, in particular due to net profit after dividends of EUR 48.0m
Other	202.8	266.7	302.1	331.3	362.6	15.6%	
Total	848.3	1,065.9	1,565.8	1,790.8	1,944.4	23.0%	

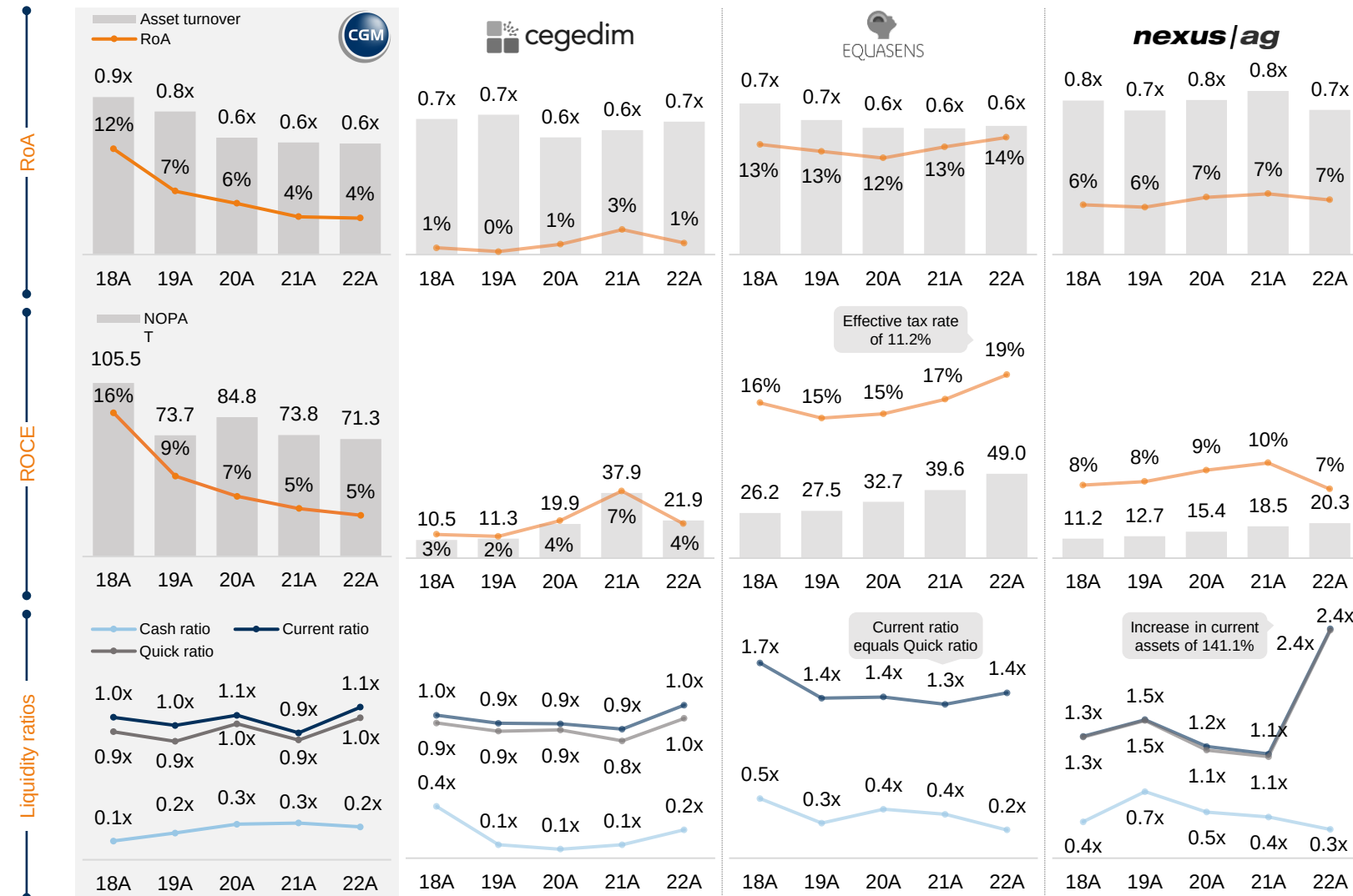


Notes: 1) 2022 onwards: Net debt (liabilities to banks and financial liabilities - cash and cash equivalents) / (EBITDA (LTM) adj. for restructuring expenses + pro rata EBITDA of newly acquired companies), until 2021: EBITDA adj. (LTM) + pro rata EBITDA of newly acquired companies); 2) As a result, the existing syndicated loan agreement was terminated and repaid; 3) Revolving loan facility; 4) "EUR1,000,000,000 Term and Multicurrency Revolving Credit Facility"; 5) Revolving multi currency loan facility; 6) Term loan | Sources: Company information | % intangible assets 2022A

While the RoA and ROCE decreased since 2020 indicating that CGM has not been able so far to realize the synergies from its acquisitions; the cash, current and quick ratios slightly rose compared to 2018 indicating an improved liquidity

Profitability and liquidity benchmarking

Description



In 2018 and 2019, CGM had a higher asset turnover (2018A: 0.9x, 2019A: 0.8x) than its key peers – thus had a higher efficiency to generate revenues from its assets

With the start of the investment phase in 2020, asset turnover fell to 0.6x, since the balance sheet total – in particular intangible assets – strongly increased (YOY growth: 46.9%) due to the investments made

As in the same period the operating expenses increased due to the investment activity, net income stagnated from 2019 to 2021 and RoA decreased until it stabilized in 2022 given an increase in net income

The ROCE of CGM has been declining from 16% to 5% since 2018; It appears that this not a sector-specific trend, but an internal company issue based on the current investment/growth strategy

RoA and ROCE in 2022 are lower than in 2020 while investments – especially for M&A – have decreased; could be a sign that CGM has not yet been able to realize synergies with its acquired companies

E.g., Equasens has a higher ROCE due to a higher EBIT margin (2022A: 25.8%) and significantly lower effective tax rate (2022: 11.2%)

CGM shows a stable current ratio of c. 1.0x; growth in current trade payables offsets the growth in current trade receivables and vice versa

Given the nature of the software business and the small (and partially not existing) share of hardware sales, the quick ratio almost equals the current ratio among all peers

While CGM's cash ratio has been quite stable at c. 0.3x since 2020, the cash ratio of Equasens and Nexus has fallen due to declining cash; in 2022, CGM and key peers show a similar cash ratio of 0.2x to 0.3x

Despite the high level of investments in recent years and increase in debt, CGM's degree of liquidity is mostly in line with the market

Sources: Company information

Notes: Cegedim, Equasens and Nexus were considered as key peer companies due to their similar product and geographic profile

04



Investment Thesis
Value Creation

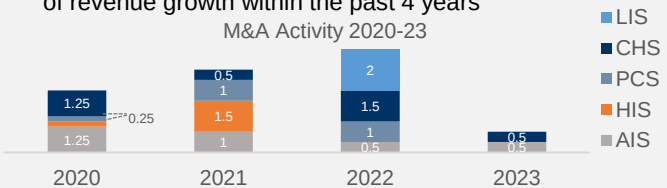


CGM's dynamic product portfolio, proven success in M&A, strategic internal investments, customer-centric solutions, and lucrative opportunities for cross- and upselling position the company for future growth, rendering it an appealing PE target

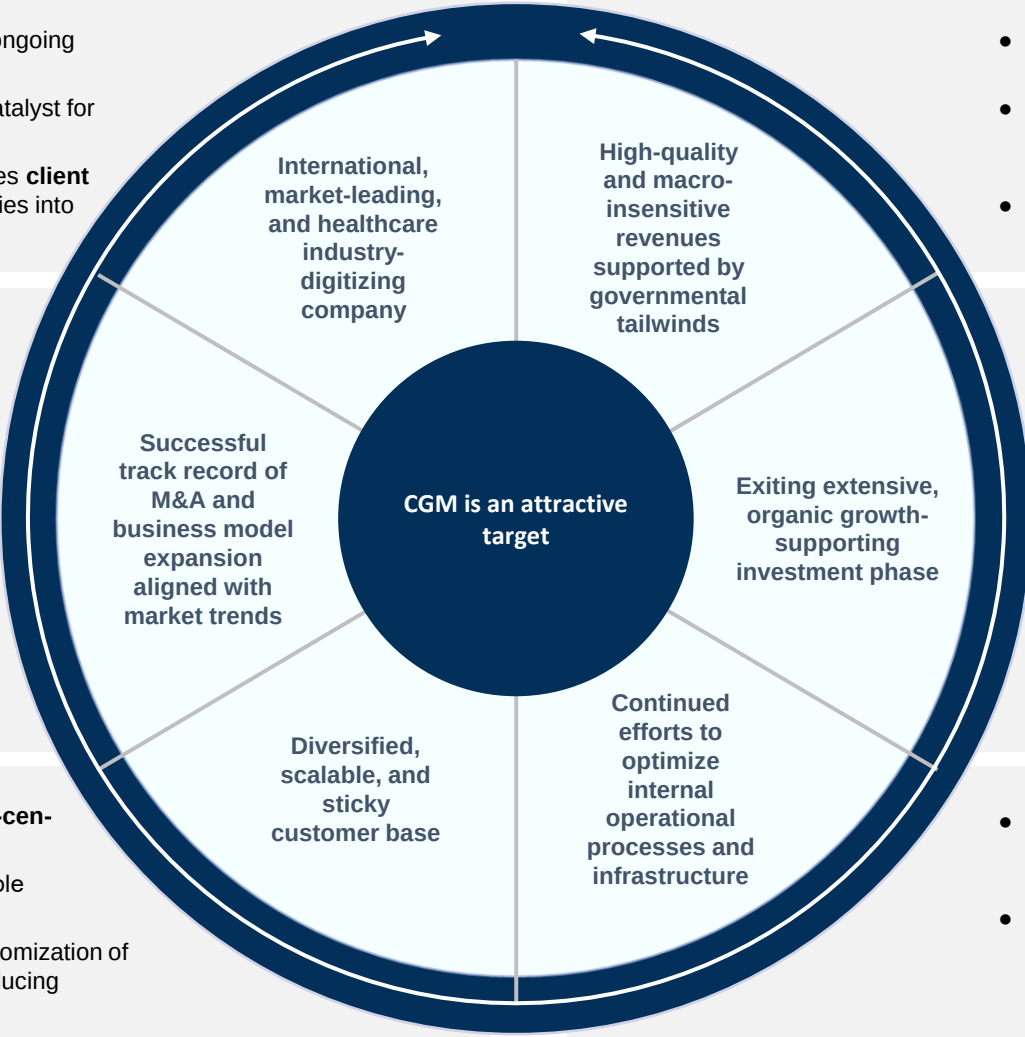
Investment highlights at a glance

- The systemically relevant healthcare industry grapples with ongoing **struggles** to attain **profitable business operations**
- **Streamlining workflows** through digitalization is a pivotal catalyst for achieving sustainable levels of profitability
- Market leading position in several European countries ensures **client access** and facilitates **cross- and up-selling** as well as entries into new segments and markets

- As a **technology leader** in the industry, 1/3 of CGM's workforce is dedicated to R&D
- Starting in the AIS sector, CGM has **effectively diversified** into HIS, LIS¹, PCS, and CHS and is currently pioneering datafication in healthcare
- **M&A** has been a **guardrail of CGM's growth** path, with >10 deals from small- to large-scale acquisitions and inorganic growth accounting for on average 65% of revenue growth within the past 4 years

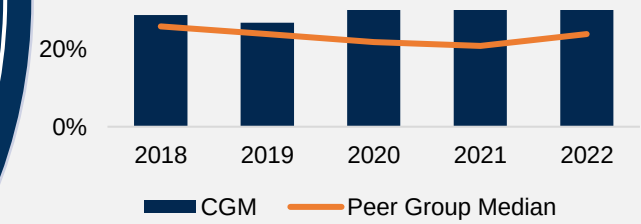


- CGM's **comprehensive product portfolio** offers **customer-centric solutions** covering the entire patient journey
- CGM's modular product portfolio approach maximizes valuable **cross- and upselling** opportunities
- Featuring several **customizable add-ons** allows for the customization of software solutions to the unique needs of each customer, inducing **increased switching costs** for customers



- CGM has experienced **>10% growth in recurring revenues** in Q1 2023 yoy, now standing at 65%
- AIS and CHS businesses with strong bottom-line conversion of **EBITDA margins >25%**, while prevalence of outdated IT systems and shortage of skilled staff will boost top-line growth
- Pan-European **governmental financial tailwinds** stimulating demand

- Initiated in 2020, crucial investments into **skilled staff, R&D, and M&A** across segments prepared CGM for sustainable growth
- Relative personnel² costs starting to return to pre-investment phase levels – stabilization of post-merger above industry-average SG&A costs bears further **margin expansion potential**



- The **OneGroup initiative**, which focuses on harmonizing the appearance to customers and internal IT systems, has **boosted AIS revenue per employee in Europe by 15% in H1/2023 yoy**
- Swift and effective integration of AI: launch of AI tool **ChatCGM** available for all employees promoting **leaner structures** and **more efficient processes** in R&D, service & support, and business operations

Sources: Company information, Mergermarket
Notes:1) Laboratory Information Systems, 2) 47% of sales in H1 2023

Unlocking sustainable growth: US expansion through M&A, organic growth efforts boosting margins, capitalizing on AI integration, and the introduction of a SaaS model will further fuel CGM’s global success story

Initiative		1	Dual track top-line growth	2	Margin improvements	3	Strategic/operational support		
Strategy		a) Moderate M&A with focus on PMI Integration and operational synergies Develop detailed operational and cultural integration roadmaps for recent acquisitions, identify overlapping functions, and implement cost cutting measures for duplicating operations Inorganic growth Too large Attractive Targets  veradigm.  German HIS  CareCloud  nexus/ag Focus on small- and medium-sized US competitors to expand CGM's US AIS market share		b) Org. growth: Focus AIS & CHS Quality offering Continue developing interoperability and customer/patient centricity within software products to improve customer experience. Align software R&D with industry trends such as cloud-transition, datafication, and healthcare personalization Brand recognition Invest into marketing, targeted sales campaigns, expand network and involvement of distributors such as Medprax and Power Unlimited through offering attractive partnership models Train internal sales personnel to promote CGM's assertiveness		Less hiring and efficient staff integration Amidst continued market consolidation, CMG invested in staffing, causing personnel expenses to rise significantly above historical averages in recent years Effective onboarding and integration will be crucial for a swift return to previous levels Synergies through M&A The integration of recent acquisitions provides the opportunity to achieve cost synergies Promising markets & high-margin focus Our business plan recommends to focus on high-margin products within CGM's most attractive segments AIS and CHS post-transaction		AI leverage Promoting advancements and swift company-wide integration of the recently launched internal AI tool ChatCGM Screening companies for potential partnerships to accelerate internal and external AI integration Potential AI Targets  abridge  aidoc  HUMA SaaS business model Support a steady transition from a license and maintenance revenue model towards a full-service subscription SaaS revenue model	
	Value Creation	Streamline CGM's past aggressive M&A activity and ensure effective and sustainable realization of synergies to support and accelerate margin recovery Grow presence in the US – the biggest and most developed IT healthcare market Acquiring US competitors simplifies market share and customer base expansion and creates competitive advantages to European competitors		CGM will prevent losing existing customers to cloud-native providers or start-ups CGM will become a leading player in the healthcare datafication trend and thus be able to capitalize on collaboration across countries and ecosystems Increasing up- and cross-selling success in the fragmented e-health market		CGM will profit from lower cost base due to less aggressive hiring than in recent years, making personnel expenses return to historical averages Additional personnel cost synergies from AI integration into business processes strategy enhancing overall personnel productivity Furthermore, CGM's bottom line will increase due to a decreasing SG&A margin driven by synergies from recent M&A transactions		Cost-saving potential in R&D, Service & Support and internal Business Operations, and workforce Differentiate software through the integration of AI tools into new product features Personnel cost saving potential through increased productivity Unlocking new customers and optimizing revenue generation	



Sources: Company websites, Dealroom, Aventis Advisors, Forbes, Yahoo Finance, CGM Annual Report 2023
Notes: 1) Post-merger integration, 2) Resulting from steady transition to full SaaS model

Margin improvements and organic top-line growth: Increased staff productivity and less aggressive hiring will re-boost margins and save EUR 410m at exit combined with a three-step action plan for organic growth to foster organic growth

Organic growth

Margin improvement

AIS

Facilitated through brand recognition initiatives

Cross-selling

Accelerated through CareCloud acquisition

French Ségur

Cloud Software Suite

~881m 0.5x

Drivers

Patient Engagement

~408m 0.2x

Telehealth

Data Suite

CHS

Action plan

- Cross-sell** CGM's French #1 paramedics software **VEGA** to European as well as the US nurses, physiotherapists, and speech therapists
- Capitalize on the **second wave of** France's healthcare digitization program "**Ségur**", which is expected to start in 2024, through offering upgrades to existent software versions to almost **100k French AIS customers**
- Develop and **up-sell** next generation of **cloud-based software**
- Integrate/cross-sell CLICKDOC** to AIS customer base and **evolve product features** towards patient journey, e.g., automatic patient invoicing or CLICKDOC Pro app for consumers
- Internationalize** CGM's developed **data suite solutions** suite INSIGHT Health², Therafox³, GHG⁴, and Intermedix⁵ and incorporate into AIS customer base
- Boost** the segment's **revenue quality** through IN-SIGHT Health's strong base of 80% recurring revenue

Relative cost share

High

Low

Personnel Expenses (45%¹)

Expenses for Goods/Services Purchased (19%¹)

Other Expenses (17%¹)

- Personnel costs** have been the major component of CGM's expense profile, typically representing about 45% on average historically
- The recent surge in this expense category to 48% can be attributed to intensified recruitment activities aimed at equipping CGM with the appropriate workforce
- Moving out of this investment phase, the proportion of personnel expenses is projected to **normalize to the pre-investment level** of 45%
- Adoption of AI is anticipated to **boost staff productivity**, notably in coding and R&D, presenting additional potential for reductions in personnel expenses

By 2028, CGM is set to improve its personnel cost margin by 6.2 percentage points, lowering it to 42.2%

2019

"Drawing on and effectively communicating the company's exclusive data access as well as its acquired analytical and multi-channel communication capabilities"

Foundation

Built internal foundations

2022

Develop CGM data collection

Expand via M&A

Evolue product portfolio

Growth

Today

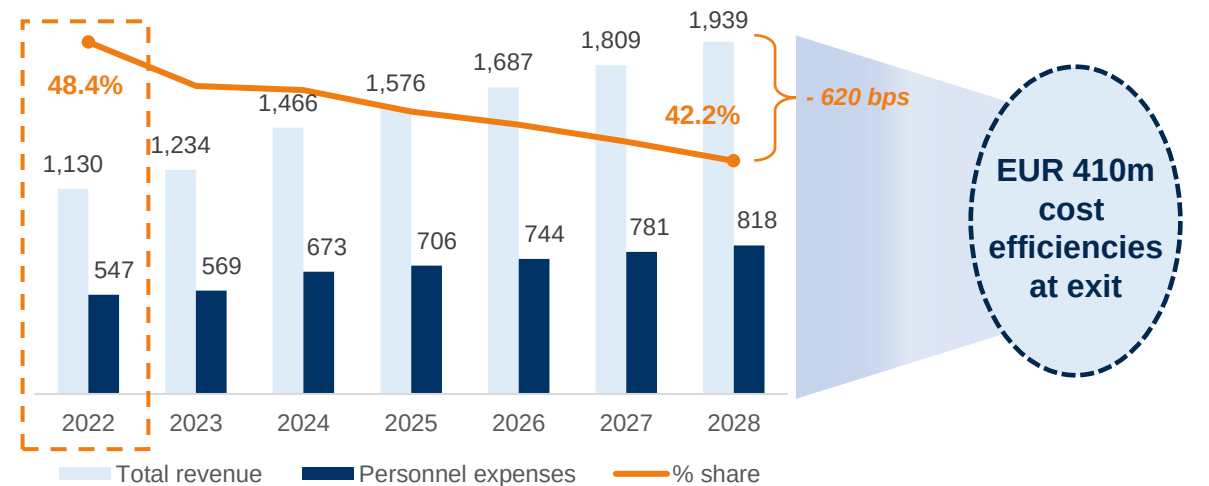
Facilitated by recent acquisition of stake in NL newline ricerche di mercato

Establish international footprint

Fully leverage unique data access/reach

Form regional collaborations

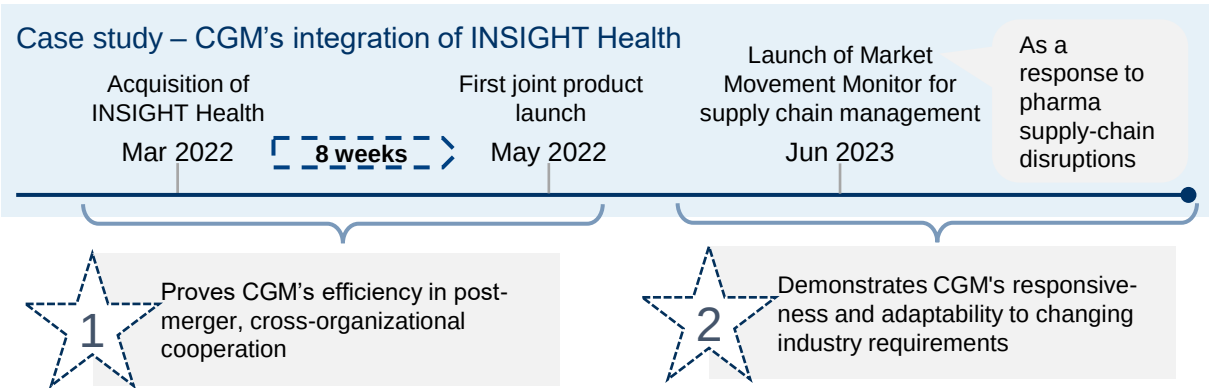
Scale





Top-line growth through moderate M&A with focus on PMI: CGM’s future M&A strategy will focus on post-merger integration of historic acquisition and the takeover of the US company CareCloud increasing its MOIC by 0.5x

M&A history (excerpt)				
Date	Target	Industry	Target Country	Deal Rationale
24.04.2023		HIS, CHS		Addition to product portfolio
22.11.2022		AIS, CHS		Addition to product portfolio
22.11.2022		LIS ¹⁾		Broadening US presence
25.03.2022		HIS, CHS, PCS		Stronger position in data solutions
01.06.2021		HIS		Stronger position in data solutions
07.12.2020		LIS		Broadening US presence
23.11.2020		AIS		Broadening US presence
05.02.2020		HIS, CHS, PCS, AIS		Complementing Spain & France portfolio



Sources: Mergermarket, CGM Annual Report 2023.
Notes: 1) Laboratory Information Systems 2) CGM acquired Cerner Corporation’s IT Healthcare business in Europe, 2) See appendix for a deep-dive on the US market

Future M&A

- A Focus on post-merger integration
- B Strategic acquisition in the US²

With **>10 deals within the past 4 years**, CGM has successfully capitalized on market consolidations to grow its CHS business and presence in the US

As a result, focus should now be redirected towards **efficient and sustainable integration processes** to unlock the maximum value of acquisitions envisioned prior to the transactions

How?

Cross segmental integration teams

Ensure collaboration and opportunity analysis across segments to identify potential synergies across business units

Future strategy

Creation of detailed future roadmaps for all subsidiaries acquired within the past two years outlining clear objectives and tangible, trackable milestones

Customer transition

Avoid customer churn during the transition through effective communication of value proposition and minimal disruption to customer-facing operations

Cultural and operational alignments

Assess and proactively address cultural and operational differences resulting from CGM’s global M&A strategy in several e-health segments

1 US target with excellent strategic fit identified

PMI streamlining is supplemented by one strategic acquisition to fuel growth and competitiveness in the US market and boost CGM’s cloud presence

CareCloud

Description

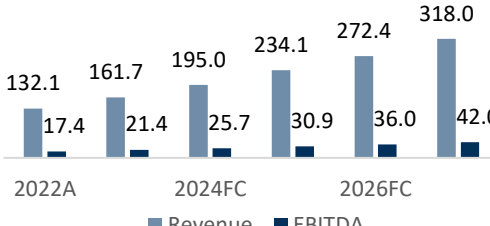
CareCloud is a listed, US-based healthcare IT company with c. 4,000 globally distributed employees, focused on revenue cycle management, EHR, and cloud software products, serving >40k healthcare providers in c. 70 specialities across the US

Market share expansion: CareCloud’s well-established footprint in the US practice management and EHR sector grants CGM access to an **additional 40,000+ customers** distributed across the entire US

Technological synergies: Integrating CareCloud’s cloud-focused software products within CGM’s existing EHR and RCM tools facilitates and **accelerates** the company’s **full cloud-transition** and creates a powerful, comprehensive AIS platform addressing growing competition from cloud-native competitors

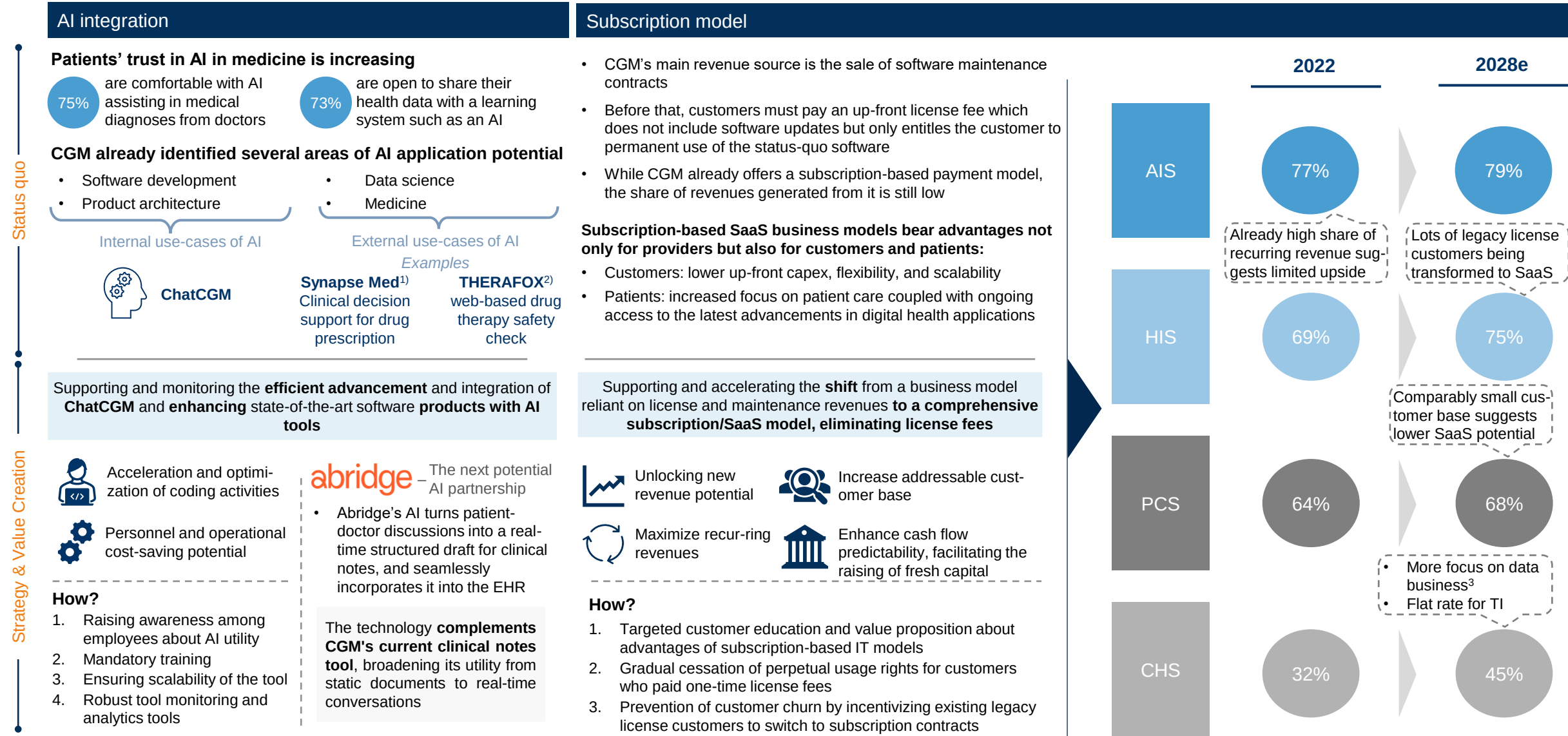
Deal Rationale & Value Creation

Top- and bottom-line contribution



Year	Revenue	EBITDA
2022A	132.1	17.4
2024FC	161.7	21.4
2026FC	195.0	25.7
2028FC	234.1	30.9
2030FC	272.4	36.0
2032FC	318.0	42.0

Strategic and operational support: Through targeted support for strategic projects, CGM will realize significant process optimization and cost reduction as well as higher recurring revenue shares



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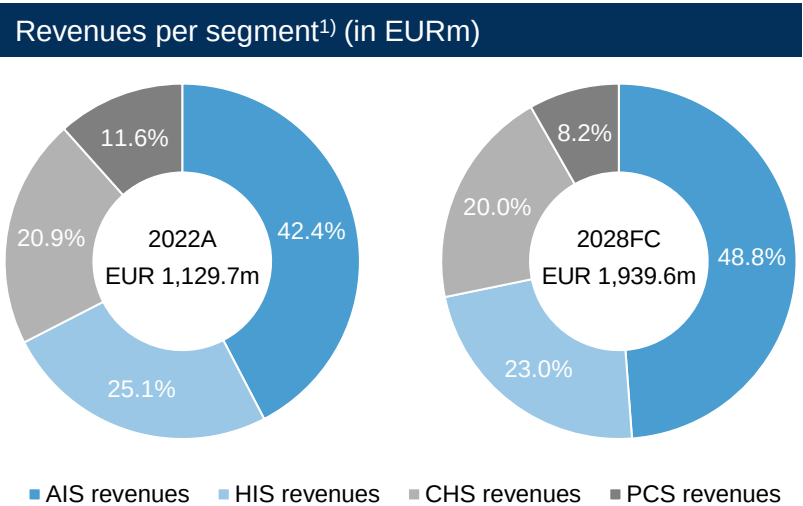


Business Plan



P&L: Revenues will increase by a CAGR of 9.4% until the exit fuelled by capitalizing on cross- and upselling initiatives combined with the integration of CareCloud in 2024 with a revenue share of 9.5% in 2028

Profit and loss statement I/II (in EURm)								Description
	2022A	2023E	2024F	2025F	2026F	2027F	2028F	
1 AIS	504.2	540.2	713.0	763.8	819.0	879.8	946.8	1 Expected CAGR_{23E-28FC} 7.1% , mainly driven by capitalizing on cross- and upselling through increased re-seller involvement and sales campaigns boosting international brand recognition. New cloud software products and Ségur to drive up-selling. Cross-selling, also to US business, as a key initiative, i.e., introducing French VEGA software to US nurses, physiotherapists, and speech therapists
2 HIS	277.2	308.6	336.1	363.7	389.6	416.9	445.2	
3 CHS	219.6	249.1	277.6	303.9	329.6	357.4	387.6	
4 PCS	130.5	135.6	139.7	145.2	149.4	155.4	159.9	2 The segment is expected to grow at a CAGR of 7.6% from 2023 to 2028. In H1 2023, >170 customers yoy have been added, which is projected to increase through the launch of a RCM ² partnership with SAP. Customer growth is further supported by a strong order intake momentum relating to Germany's KZHГ the recent branch into mobile care. Pricing per average customer is expected to improve through enhanced module offerings, like cloud- and G3 technology based CGM Clinical
Other revenues	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Total revenues	1,129.7	1,233.8	1,466.6	1,576.7	1,687.7	1,809.6	1,939.6	
% CGM revenues	100.0%	100.0%	90.9%	91.0%	90.9%	90.7%	90.5%	3 The segment is projected to be the fastest-growing with a 9.2% CAGR from 2023 to 2028, driven by recent strategic acquisitions enhancing the patient engagement and data business catering to market shifts toward datafication and customerization. The recent acquisition of a 20% stake in an Italian data company, opens international markets for CGM's data solutions. An upcoming integration with the AIS department is expected to enhance cross-selling opportunities to ambulatory institutions and their customers, capitalizing on internally generated synergies
5 % Carecloud revenues	n/a	n/a	9.1%	9.0%	9.1%	9.3%	9.5%	
Capitalized inhouse services	44.8	35.4	29.4	25.6	23.3	22.1	21.9	
Other income	19.4	15.2	15.2	15.2	15.2	15.2	15.2	4 Moderate growth expectations of 3.3% CAGR_{23E-28FC} , due to already relatively saturated pharmacy market . Historical growth on avg. higher but mainly due to high inorganic growth in Italy which will slow down. The addressable customer base is declining and continues to be sticky, shown in historical and future recurring revenues
								5 Conservative revenue growth forecast driven by company's RCM solutions, which saw a near 300% increase since 2021. A significant portion of the 2023 pipeline is expected to materialize in 2024. Due to significant overlaps with CGM's US business, post-acquisition, growth rates are expected to climb from 6% to 10% upon exit, spurred by investments in further US expansion as described above and cross-selling to AIS & CHS customers and vice versa



Key initiatives driving top line growth		
Segment	Drivers	Initiatives
AIS		CGM STUDIO CGM XDENT
HIS		CGM CLINICAL CGM VIYU
PCS		CGM STELLA Launch planned for April 2024
CHS		

Notes: 1) Excluding the segment "Other", 2) Revenue cycle management | Up-selling, Cross-selling, New customers/projects, Price increases, Internationalization



P&L: The development of the cost structure is characterized by a reduction in personnel expenses to 42.2% resulting in an EBITDA CAGR of 14.5% at the exit in 2028

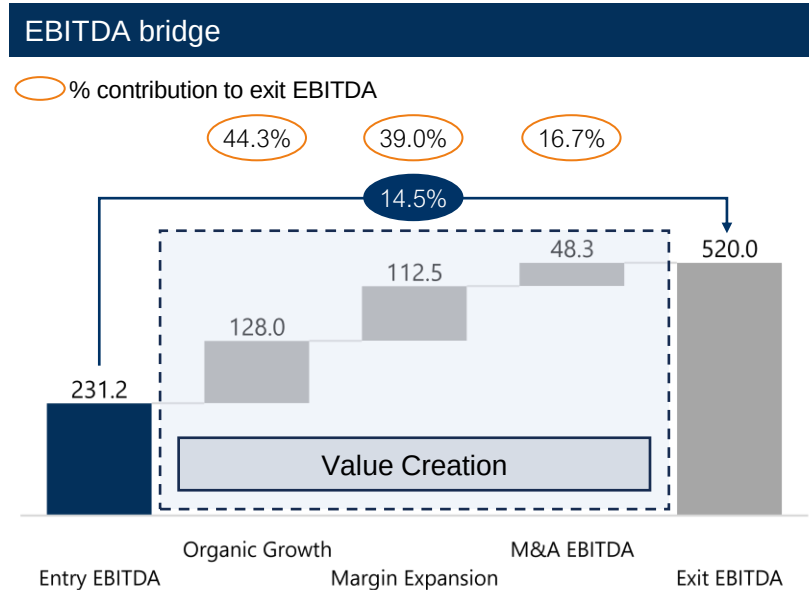
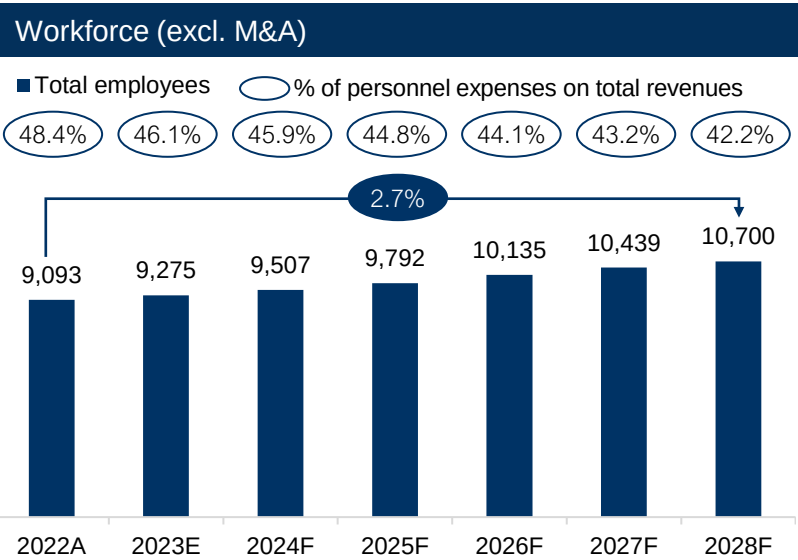
Profit and loss statement II/II (in EURm)							
	2022A	2023E	2024F	2025F	2026F	2027F	2028F
1 Expenses for goods and services purchased	(216.4)	(224.0)	(235.4)	(250.4)	(263.2)	(278.4)	(297.6)
2 Personnel expenses	(546.7)	(568.8)	(672.9)	(705.6)	(743.8)	(781.4)	(818.1)
Net impairment losses on financial assets	(5.0)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)
3 Other expenses	(209.5)	(218.6)	(266.2)	(281.7)	(297.4)	(316.2)	(336.3)
4 EBITDA	216.4	268.3	332.0	375.1	417.2	466.3	520.0
% margin	19.2%	21.7%	22.6%	23.8%	24.7%	25.8%	26.8%
Depreciation of PP&E and right-of-use assets	(42.8)	(46.4)	(50.1)	(52.2)	(54.1)	(55.6)	(57.0)
EBITA	173.6	221.9	281.9	323.0	363.1	410.7	463.0
Amortization of intangible assets	(69.6)	(73.3)	(81.6)	(86.3)	(84.7)	(84.2)	(86.7)
Amortization of financing fees	0.0	(3.2)	(3.2)	(3.2)	(3.2)	(3.2)	(3.2)
5 EBIT	104.0	145.5	197.1	233.5	275.2	323.3	373.1
% margin	9.2%	11.8%	13.4%	14.8%	16.3%	17.9%	19.2%

- Description
- 1

COGS expected to grow with sales, while **maintaining historic gross profit margin targets of 82%** across the holding period. Stronger % of sales related to software and maintenance cost and reduced % hardware cost due to stronger shift to recurring revenue and lower hardware sales with the majority customers being equipped by now
- 2

Personnel expenses expected to decrease in comparison to total sales, closely tied to objectives set in the value creation to drive margin expansion. CGM workforce is expected to grow by ~1,700 employees during the holding period with an expected **average salary per employee** of approx. **EUR 55k and EUR 70k** incl. social security cost, termination benefits and other personnel expenses. The **sharper increase in 2024**, is based on **consolidation effects from the CareCloud acquisition**, whose total personnel costs are set to improve as the firm strategy is shifted to higher efficiency
- 3

Cost basis predicted to be growing as firm expands top line. However, **in % of total revenues expected to improve** to 2019 levels of 16.9% of total organic revenues at exit year. Cost among others predominantly consists of IT services amongst others



- 4

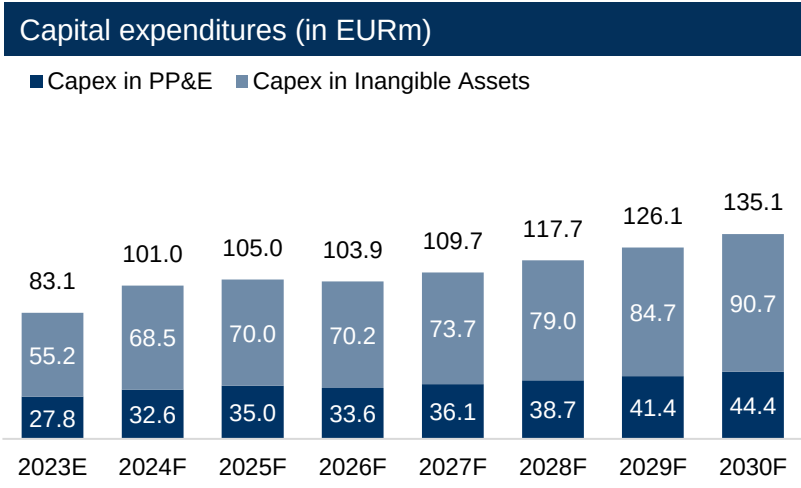
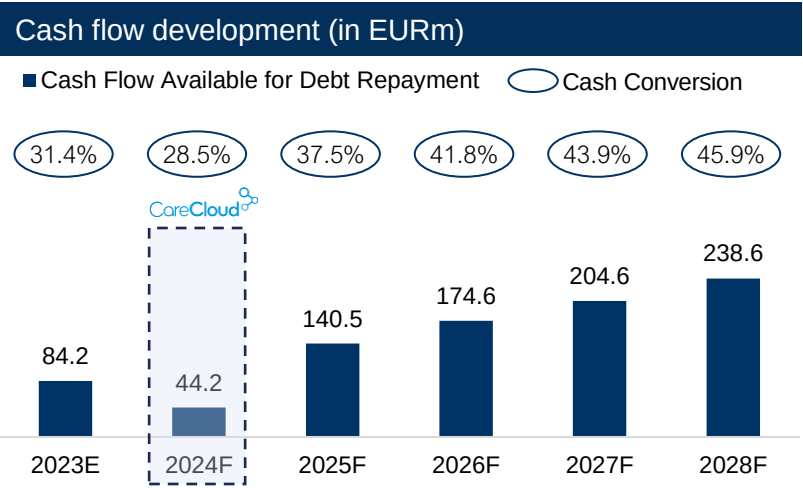
EBITDA is expected to have a CAGR_{23E-28FC} of 14.1% and **CAGR_{22A-28FC} of 14.5%** (based on entry adjusted EBITDA). This growth is anchored by a **strong top-line expansion** across various segments, which is **expected to contribute 44.3% to EBITDA** at the end of the forecast period. Enhancements in operational efficiency, particularly through **staff cost savings and a moderated pace of hiring** compared to historical trends, are anticipated to account for **39.0% of the EBITDA** increase. Additionally, **CareCloud** is forecasted to make a significant impact, contributing EUR 48.3 million, which represents **16.7%** of the value generated in EBITDA
- 5

Pressure on EBIT margins mostly stems from **depreciation**, relating to PP&E, as well as amortization, which has been a larger component due to the high amount of intangible assets (excluding goodwill). However, **margins are set to improve due to decreasing D&A in % of total revenues** along the holding period



Free Cash Flow: The cash flow is significantly bolstered by the robust growth in EBITDA margins, leading to a marked improvement in the cash conversion ratio, with the only exception being the influence of the 2024 add-on acquisition

Cash flow statement (in EURm)							Description
	2023E	2024F	2025F	2026F	2027F	2028F	
EBITDA	268.3	332.0	375.1	417.2	466.3	520.0	1 Corresponds to the total interest paid on the P&L, subtracting PIK interest for corresponding years results in total cash interest paid for given year. Downward moving trend due to mandatory repayments of the Term Loan A (amounting to EUR 231.2m) which is almost fully repaid by the exit year
Financial income	2.4	2.4	2.4	2.4	2.4	2.4	
Result from companies accounted for using equity method	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	
1 Interest	(112.5)	(106.9)	(94.8)	(90.4)	(88.8)	(87.9)	2 CFO is growing with a CAGR_{23E-28FC} of 16.3% along the holding period, with growth primarily driven by expanding EBITDA . Expectations are no significant working capital improvements due to already strong trade payables contract positioning as well as sufficient trade receivable development (Avg. DSO 53 days). Other WC positions inherit only a minor impact on overall cash generation. As such, cash outflow is mostly related to fuel future top line growth prospects
Tax	(10.6)	(27.8)	(42.3)	(56.1)	(71.0)	(86.2)	
Other non-cash items (PIK)	7.1	7.6	8.1	8.6	9.1	9.7	
Changes in Net Working Capital	12.6	(11.4)	(2.8)	(3.1)	(3.5)	(1.5)	3 Cash flow available for debt repayment is positively impacted by CGM's EBITDA margin development throughout the holding period. capital expenditures are expected to mainly be related to investments in intangible assets , namely software rights as well as customer relationships. Equipment investments are in-line with top line growth development but remain a smaller component of total capex. Capex grows stronger in the beginning years , to enable CGM's top line growth targets, dropping from 7% of total revenues to 6% at exit. Cash conversion as well as overall CFADR is impacted in 2024 by the CareCloud acquisition, assuming 50/50 debt/cash financing structure
2 Cash flow from operations (CFO)	167.3	195.8	245.6	278.4	314.4	356.3	
Capital expenditures	(83.1)	(101.0)	(105.0)	(103.9)	(109.7)	(117.7)	
M&A acquisitions	0.0	(101.1)	0.0	0.0	0.0	0.0	4 Cash flow available for equity holders is influenced by the mandatory repayments on Term Loan A , which are approximately 16% of the original loan amount. For the year 2024 , the cash flow for optional repayment is projected to be EUR (2.0m), after accounting for the mandatory debt repayments and the financial impact of the CareCloud acquisition. Consequently, the RCF will be utilized to fulfill these repayment obligations. Based on the table, CGM has adequate headroom to even retire the TLA debt earlier through optional repayments which are excluded in the calculation. Looking ahead, CGM is expected to substantially increase the cash flow available for equity holders , with projections showing a rise from EUR 41.9m in 2025 to EUR 192.9m by 2028, reflecting the company's strong cash-generating capabilities
Revolver Drawdown for M&A	0.0	50.6	0.0	0.0	0.0	0.0	
3 Cash flow available for debt repayment	84.2	44.2	140.5	174.6	204.6	238.6	
Mandatory debt repayment	(46.2)	(46.1)	(46.1)	(46.0)	(45.9)	(45.8)	
Cash flow available for optional repayment	38.0	(2.0)	94.5	128.6	158.8	192.9	
Optional debt drawdown / (repayment)	0.0	2.0	(52.5)	0.0	0.0	0.0	
4 Cash flow available for equity holders	38.0	0.0	41.9	128.6	158.8	192.9	



06



Valuation

Capital Structure

Returns



Valuation: CCA and CTA imply an EBITDA multiple range of 8.5 – 17.6x and a sales multiple of 1.2 – 4.2x, combined with the DCF valuation resulting in an entry valuation of EUR 2,982.2m at 12.9x EV/EBITDA

Methodology	Implied multiples	Indicative CGM value range (in EURm)	Commentary
Comparable Company Analysis (CCA)	1.1x – 3.5x EV/SALES LTM EUR 1,208m		- The EV/SALES multiple for the last twelve months is in between 1.1x (25th percentile) and 3.5x (75th percentile) with the median at 2.5x - The EV/SALES multiple for 2022A is in between 1.2x (25th percentile) and 4.2x (75th percentile) with the median at 2.6x - The EV/EBITDA multiple for the last twelve months is in between 9.5x (25th percentile) and 13.9x (75th percentile) with the median at 11.6x - The EV/EBITDA multiple for 2022A is in between 8.5x (25th percentile) and 13.6x (75th percentile) with the median at 12.1x
	1.2x – 4.2x EV/SALES '22A EUR 1,129m		
	9.5x – 13.9x EV/EBITDA LTM EUR 262m		
	8.5x – 13.6x EV/EBITDA '22A EUR 216m		
Comparable Transaction Analysis (CTA)	2.4x – 4.4x EV/SALES '22A EUR 1,129m		- The CTA EV/SALES multiple is in between 2.4x (25th percentile) and 4.4x (75th percentile) with the median at 2.7x - The CTA EV/EBITDA multiple is in between 15.4x (25th percentile) and 17.6x (75th percentile) with the median at 17.1x
	15.4x – 17.6x EV/EBITDA '22A EUR 216m		
Discounted Cash Flow (DCF)	Implied 2.6x EV/SALES EUR 1,129m		- The valuation of the DCF implies a SALES multiple of 2.6x and an EBITDA multiple of 12.9x - The range of the DCF based valuation is based on the sensitivity analysis
	Implied 12.9x EV/EBITDA EUR 231m		

Resulting Entry Valuation ²⁾	2.6x EV/SALES LTM EUR 1,208m	Enterprise Value EUR 2,982.2m at a 12.9x EV/EBITDA	- For the resulting entry valuation, an EV/EBITDA of 12.9x was chosen corresponding to the median of the CGM's most comparable peers Nexus AG, Cegedim and Equasens and the DCF implied multiple - The EBITDA multiple of 12.9x was applied to the 2022A EBITDA of EUR 231m and results in an entry valuation of EUR 2,982.2m
	12.9x EV/EBITDA LTM EUR 231m		

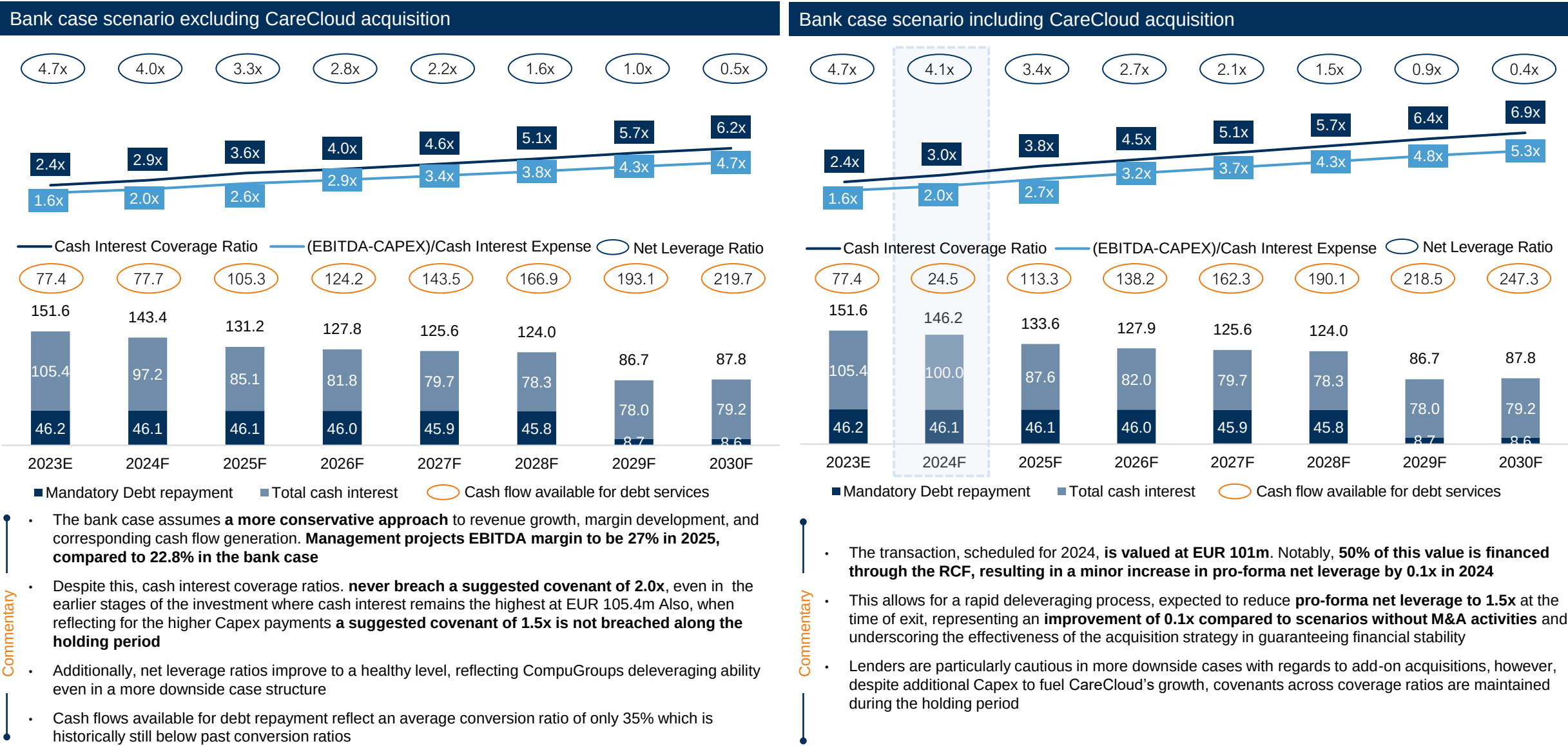
Sources: Capital IQ, Company information, Annual Reports
Notes: 1) Range is from 25th to 75th percentile and valuation is based von Median 2) The entry valuation is based on the 2022A EV/EBITDA median multiple of Equasens, Nexus AG and Cegedim and the EBITDA multiple indicated by the DCF

Capital Structure: Robust financing structure, encompassing a mix of revolving credit, term loans, and mezzanine financing, and providing strategic equity incentives for key management to participate in the buyout

Sources and uses						Commentary				
Sources of funds		EURm	x EBITDA	%	Uses of funds		EURm	%	Financing	- EV/EBITDA entry multiple of 12.9x results in an EV of EUR 2,982.2m, incl. EUR 55.3m in fees - Proposed financing package (5.5x leverage): Revolving Credit facility for acquisitions and liquidity, Term Loan A-C with interest rates at E+425bps and E+450bps, and mezzanine (PIK and cash interest) - Leverage package justified based on high recurring revenues and strong market position, giving confidence in the ability to service debt (in line with precedent transaction, acquisition of Software AG by Silver Lake with leverage of >5.5x) - Over the investment horizon, it is anticipated that the Term Loan A (16% mandatory amortization) and the remaining tranches are fully repaid at exit - The transaction also includes an equity stake of roughly 58%, which includes a management participation in the buyout, aligning with long-term performance incentives (<i>Further discussed below</i>)
RCF		0.0	0.0x	0.0%	EBITDA		231.2			
Term loan A		231.2	1.0x	7.6%	EV/EBITDA multiple		12.9x			
Term loan B		462.4	2.0x	15.2%	Enterprise Value		2,982.2	98.2%		
Term loan C		462.4	2.0x	15.2%						
Unitranche loan		0.0	0.0x	0.0%	Transaction fees		29.8	1.0%	Mgmt. Incentives	- The equity package offers significant incentives to key management members, pivotal for the success of the transaction (designed to align their personal objectives with the company's long-term success) Michael Rauch, CEO of CompuGroup, and Hannes Reichl, head of the HIS department, are identified for sweet equity incentives, acknowledging their 10+ years industry expertise that is crucial for the presented action plan; second-tier management is anticipated to be included as well (i.e. Daniela Hommel incoming CFO & Emanuele Mugnani), recognizing their role across segments and ensuring a collective drive towards the company's growth - Corresponding with the prevailing compensation framework, the sweet equity proposition amounting to EUR 24m in total allows management to acquire a 5% ownership in the firm - The remainder of the transaction is then financed through sponsors equity and a shareholder loan bearing payment-in-kind (pref. Equity)
Mezzanine		115.6	0.5x	3.8%	Financing fees		25.4	0.8%		
Total debt		1,271.5	5.5x	41.9%	Total fees		55.3	1.8%		
Sweet equity		24.0	0.1x	0.9%						
thereof Rauch & Reichl		18.0	0.1x	0.6%						
thereof 2nd level mgmt		6.0	0.0x	0.2%						
Sponsors equity		456.0	2.0x	15.0%						
Total ordinary equity		480.0	2.1x	15.8%						
Shareholder loan		1,286.0	5.6x	42.3%						
Total equity		1,766.0	7.6x	58.1%						
Total sources		3,037.4	13.1x	100.0%	Total uses		3,037.4	100.0%	Debt Alternative	
Type of debt		Term	Amort.	x EBITDA	EURm	Interest				
RCF / M&A facility		-	-	0.0x	0.0	E+425bps				
Term loan A		6 years	Amort.	1.0x	231.2	E+425bps				
Term loan B		8 years	Bullet	2.0x	462.4	E+450bps				
Term loan C		8 years	Bullet	2.0x	462.4	E+450bps				
Mezzanine		10 years	Bullet	0.5x	115.6	-				
PIK element		-	-	-	-	6%				
Cash element		-	-	-	-	8%				
Shareholder loan		8 years	Bullet	5.6x	1,284.1	-				
PIK element		-	-	-	-	8%				



Credit Overview: CompuGroup maintains strong deleveraging and covenant compliance in conservative bank case scenario, ensuring robust coverage ratios even when accounting for the CareCloud acquisition in 2024



Commentary

The bank case assumes a more conservative approach to revenue growth, margin development, and corresponding cash flow generation. Management projects EBITDA margin to be 27% in 2025, compared to 22.8% in the bank case

Despite this, cash interest coverage ratios. never breach a suggested covenant of 2.0x, even in the earlier stages of the investment where cash interest remains the highest at EUR 105.4m Also, when reflecting for the higher Capex payments a suggested covenant of 1.5x is not breached along the holding period

Additionally, net leverage ratios improve to a healthy level, reflecting CompuGroups deleveraging ability even in a more downside case structure

Cash flows available for debt repayment reflect an average conversion ratio of only 35% which is historically still below past conversion ratios

Commentary

The transaction, scheduled for 2024, is valued at EUR 101m. Notably, 50% of this value is financed through the RCF, resulting in a minor increase in pro-forma net leverage by 0.1x in 2024

This allows for a rapid deleveraging process, expected to reduce pro-forma net leverage to 1.5x at the time of exit, representing an improvement of 0.1x compared to scenarios without M&A activities and underscoring the effectiveness of the acquisition strategy in guaranteeing financial stability

Lenders are particularly cautious in more downside cases with regards to add-on acquisitions, however, despite additional Capex to fuel CareCloud's growth, covenants across coverage ratios are maintained during the holding period

Strategic Exit in 2028: The exit in 2028 produces a management IRR of 43.4%, a combined IRR of 23.3%, and a 3.5x MOIC with combined exit proceeds of EUR 6,222.6m ensuring maximum returns and performance incentivization

Return expectations (in EURm)							Commentary						
	2025F	2026F	2027F	2028F	2029F	2030F							
EBITDA	375.1	417.2	466.3	520.0	580.1	643.1	- The planned 2028 exit for CGM coincides with significant realization of management incentives, ensuring a balance with the underlying sponsor hurdle rate. This timing is strategically chosen to maximize the return on investment for all equity participants - Forecasts indicate a substantial increase in cash balance from EUR 79.9m to EUR 560.1m from 2025 to 2028. This surge reflects the successful integration from the CareCloud investment and implementation of key value creation strategies during the holding period. Key to this development is CompuGroup's ability to enhance cash flows available to equity holders, which are projected to increase from EUR 41.9m in 2025 to EUR 192.9 million in 2028 - The conversion from enterprise value to ordinary equity is primarily influenced by a significant shareholder loan (EUR 2,047m) and term loans B and C (each EUR 462.4m), which are each projected to be fully paid-off at exit of the investment - For conservative purposes, the transaction assumes a stable exit multiple of 12.9x based on the valuation analysis. However, given the current economic market and a steep decrease in valuations across technology and healthcare sectors, there could be argumentation for an improved exit multiple which enhances IRR and MOIC at exit, as depicted in belows sensitivities describing the impact on sponsor MOIC and IRR. As a comparison, CGMs 10-year median EV/EBITDA multiple is 17.1x, with all time high being 30.3x - Sensitivities showcase a potential increase in exit multiples, 1.0x increase based on a 12.9x entry could already boost sponsor IRR to 24.5% - The total return yields an IRR of 23.3% and a MOIC of 3.5x with combined exit proceeds of EUR 6,222.6m. Conservative estimates for the CareCloud development suggest a total contribution to sponsor IRR of 2.0% and an incremental MOIC of 0.4x						
Exit multiple	12.9x	12.9x	12.9x	12.9x	12.9x	12.9x							
Implied enterprise value	4,839.4	5,382.0	6,015.0	6,708.0	7,482.7	8,296.5							
Ending debt balance	(1,155.8)	(1,118.4)	(1,081.7)	(1,045.5)	(1,047.1)	(1,049.3)							
Ending cash balance	79.9	208.5	367.3	560.1	826.2	1,129.1							
Implied equity value	3,763.4	4,472.1	5,300.6	6,222.6	7,261.8	8,376.2							
Shareholder loan	(1,624.9)	(1,754.9)	(1,895.3)	(2,047.0)	(2,210.7)	(2,387.6)							
Sponsor monitoring fees	0.0	0.0	0.0	0.0	0.0	0.0							
Ordinary equity	2,138.5	2,717.2	3,405.3	4,175.6	5,051.0	5,988.6							
thereof sweet equity	106.9	135.9	170.3	208.8	252.6	299.4							
Ordinary equity (sponsor)	2,031.5	2,581.3	3,235.0	3,966.8	4,798.5	5,689.2							
Management													
Exit proceeds	106.9	135.9	170.3	208.8	252.6	299.4							
Initial investment	24.0	24.0	24.0	24.0	24.0	24.0							
MOIC	4.5x	5.7x	7.1x	8.7x	10.5x	12.5x							
IRR	64.5%	54.2%	47.9%	43.4%	39.9%	37.1%							
Sponsor (incl. SHL)													
Exit proceeds	3,656.5	4,336.2	5,130.3	6,013.8	7,009.2	8,076.8							
Initial investment	1742.0	1,742.0	1,742.0	1,742.0	1,742.0	1,742.0							
MOIC	2.1x	2.5x	2.9x	3.5x	4.0x	4.6x							
IRR	28.0%	24.1%	22.9%	22.9%	22.0%	21.1%							
Combined return													
Total return	3,763.4	4,472.1	5,300.6	6,222.6	7,261.8	8,376.2							
MOIC	2.1x	2.5x	3.0x	3.5x	4.1x	4.7x							
IRR	28.7%	26.1%	24.6%	23.3%	22.4%	21.5%							

MOIC sponsor (incl. SHL) sensitivity

		Entry Multiple				
		10.9x	11.9x	12.9x	13.9x	14.9x
Exit Multiple	10.9x	3.9x	3.3x	2.9x	2.5x	2.3x
	11.9x	4.3x	3.6x	3.2x	2.8x	2.5x
	12.9x	4.7x	4.0x	3.4x	3.0x	2.7x
	13.9x	5.1x	4.3x	3.7x	3.3x	3.0x
	14.9x	5.5x	4.6x	4.0x	3.5x	3.2x

IRR sponsor (incl. SHL) sensitivity

		Entry Multiple				
		10.9x	11.9x	12.9x	13.9x	14.9x
Exit Multiple	10.9x	25.4%	22.0%	19.2%	16.8%	14.8%
	11.9x	27.4%	24.0%	21.1%	18.7%	16.5%
	12.9x	29.3%	25.8%	22.9%	20.4%	18.2%
	13.9x	31.0%	27.4%	24.5%	22.0%	19.8%
	14.9x	32.6%	29.0%	26.0%	23.5%	21.2%

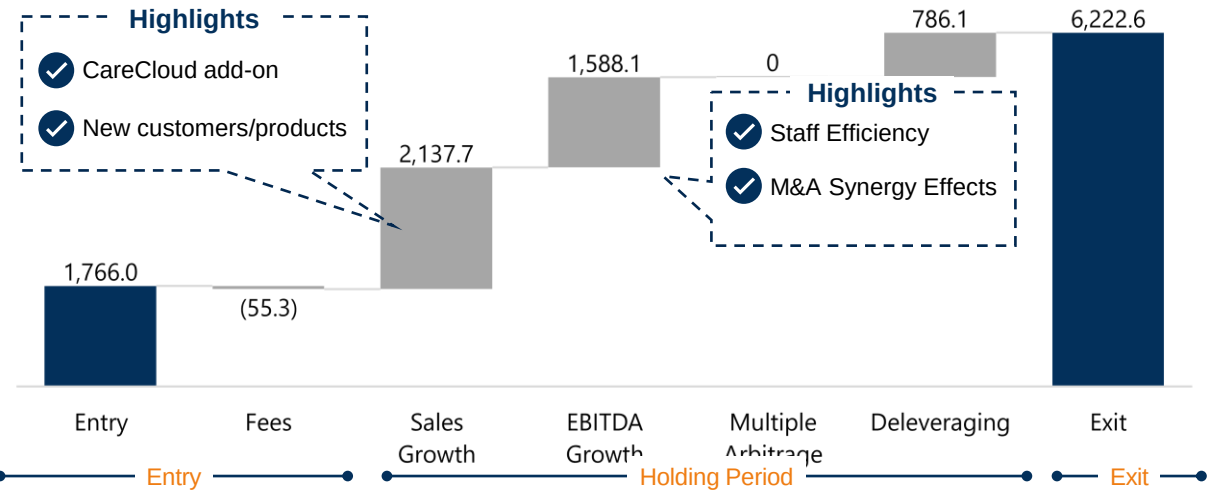
Notes: year of predicted exit



Combining all value drivers: Most value creation is generated by top-line and EBITDA growth, amounting to EUR 3,725m in total, which is additionally bolstered by the deleveraging effect, resulting in an overall created value of EUR 4,512m

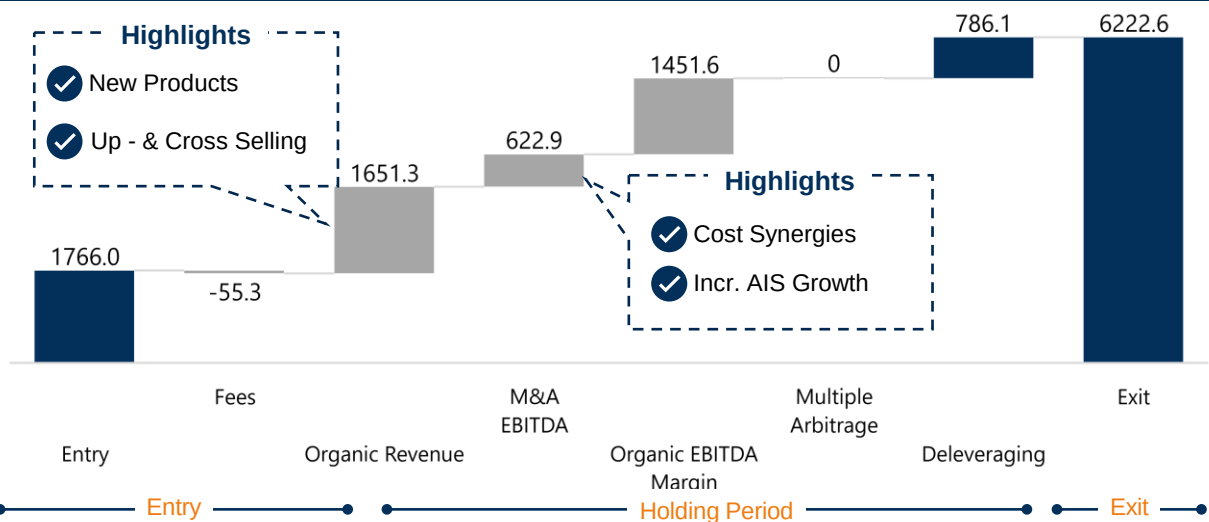
Combined value driver at exit in 2028 (in EURm)

Commentary



- During the holding period, there is a strategic shift in revenue towards the AIS segment, with its revenue share projected to grow by over 6% from 2022 to 2028. This increase is partly due to the strategic **acquisition of CareCloud**, which brings **c. 40,000 additional U.S. customers** and a forecasted exit revenue of EUR 184.3 million. Additionally, the planned launch of CGM's successful French paramedics software **VEGA in the US** is expected to draw new customers, while strong **momentum in KHZG order intake** drives customer acquisition in the HIS segment
- Overall, growth in sales, increase in EBITDA and a reduction of the debt level result in **EUR 4,511.8m of additional value**
- Initial advisory and banking fees, primarily related to due diligence and debt advisory services from financial institutions, are expected to amount to EUR 55.3m, impacting the value initially.
- There is no forecast for **value gained through multiple arbitrage** but as outlined in the previous page, **there exists potential argumentation for multiple arbitrage** going forward based on prevalent market conditions
- The primary contributor to the enhanced EBITDA is a general improvement in the cost structure, with a significant reduction in personnel expenses being a key factor
- Deleveraging**, the process of fully repaying the debt taken, contributes to the exit value with EUR 786.1m

Split organic vs. inorganic value driver at exit in 2028 (in EURm)



- The impact of organic revenue growth on the overall financial improvement is substantial, **contributing EUR 1,651.3 million**. Main drivers include the **planned introduction of CGM's successful French paramedics software VEGA to the US, up-selling the next generation of cloud-based software, and expanding the company's data business**
- Acquisition of CareCloud contributes significantly to the overall value created, **adding EUR 622.9 million**, which accounts for approximately **14% of the value generated** during the holding period. This substantial increase is primarily attributed to cost reductions resulting from synergies with CGM's North American operations
- Additionally, the integration of resources from CGM's CHS and AIS segments provides CareCloud's research teams with access to broader resources, enhancing their capabilities and contributing to the overall value uplift
- Notable improvement in organic EBITDA margin, **contributing EUR 1,451.6m as well as substantial deleveraging of yielding EUR 786.1m**. The cash generation can be credited to CGM's effective management in significantly reducing the Term Loan A balance while **concurrently boosting cash reserves during the holding period**, leading to a marked decrease in the overall net debt at exit

07



Due Diligence
Exit

A strategic exit is the most appealing option, as CGM’s international competitors are expanding through inorganic growth and therefore pay high takeover premiums increasing the investment’s return – additionally, large PE investors provide a reasonable exit opportunity

1 Strategic acquisition

- The IT healthcare market is in a phase of strong consolidation and M&A activity – larger competitors would be quickly interested to achieve market growth by taking over CGM
- SAP, GE Healthcare and Oracle all show a strong track record in acquiring competing companies to either increase their market share or enter foreign markets
- The acquisition of Cerner by Oracle in 2022 could be the blueprint for a strategic takeover of CGM
- Further: a strategic buyer could enable its entry into the European (DACH) market through an acquisition of CGM

Potential Buyer Circle

Advantages	Disadvantages
• Higher valuation¹⁾ due to a premium paid by the buyer for possible realization of synergies and the strategic fit • Full exit possible	• Long closing process due to regulation and negotiations about integration • Often not supported by management due to fear of lay-offs



2 Secondary buyout

- Private equity firms have a successful track record in the are of (IT healthcare) software and are experienced in integrating and improving companies in this industry
- Strong track record in the software sector shows how attractive an investment into a well-developed software company is for private equity firms – recent PE transactions were:
 - Acquisition (£14m) and sale (£970m) of healthcare software company *Allocate* by *Hg Capital* in 2022
 - Acquisition of consumer-directed healthcare software provider *Alegeus* by *Vista Equity Partners* in 2018

Potential Buyer Circle

Advantages	Disadvantages
• Fast execution due to nature of PE • Often supported by management through managerial incentives	• PE buyers pay less due to own high return expectation • Due diligence • Deal value dependent on economic conditions such as interest rates



3 Initial Public Offering

- When considering exiting CGM via an IPO, the timing is crucial as it has a considerable influence on the valuation and therefore the return of our investment
- The decision which stock exchange to choose for a public offering depends on the potential investor circle and the microeconomic condition of the exchange’s economy
- Private equity firms have been exiting their investments via an IPO when they expect their return to have a high upside potential
- An IPO is the only exit in which the exiting fund can maintain a share in the company

Potential Stock Exchange

Advantages	Disadvantages
• Capital raised via the IPO can be used to pay off existing debt • Increased public awareness of the company could generate market share	• The exit via an IPO is more costly due to funding for financial reporting and oversight which might be an argument against it



Sources: Mergermarket, Talmor and Vasvari (2011)
Notes: 1) Assuming the seller is in a strong position and not under pressure

Commercial, financial and operational red flag items are be part of an in-depth due diligence – this includes a detailed investigation of historical capital expenditures and the nature of the capitalized in-house services

	Financial	Commercial	Legal	Operational	IT Security
Scope	Provision of key performance indicators (KPIs) directly from CGM’s financial departments	Provide documents supporting a detailed understanding of the target company’s commercial viability, risks and opportunities	Attain a level of confidence in the likelihood of future legal disputes, and establish favorable contractual arrangements	Assess CGM’s operational efficiency, identify potential synergies, and uncover any operational risks that could impact the success of the acquisition	Assess the security of CGM’s software and threat of external cyber attacks
Required Items	- Investigate the nature of high historical Capex & R&D - Unaudited financial statements - Schedule of all debt agreements and financial obligations - Description of off-balance sheet or off-income statement items - Summary of all CAPEX planned in the next 12 months - Copies of all bank statements and accounts	- Churn data (monthly/annual churn rate in percentage) - Detailed country-specific customer base and customer concentration (revenue share of largest customer and number of top customers) - Revenue per Customer and customer Acquisition Cost - Copies of contracts with customers - History of “OneGroup” project - Analysis of competition and internal benchmarking reports	- Compliance Audit: Assess adherence to laws and regulations - Contractual Review: Evaluate obligations and liabilities in agreements - Intellectual Property Check: Examine risks related to intellectual property registrations, contracts and litigation - Litigation Analysis: Evaluate ongoing legal disputes and their potential impact on the business	- Investigate the nature of capitalized in-house services - Schedule of equipment split by capital vs. operating lease - Copies of all contracts with suppliers, customers and governments - Dependence on public funding and support for future projects - Breakdown of activities by product type, geography and sales channel	- Detailed summary of the key security protocols - Description of backups and disaster recovery policies - Detailed description of data privacy policies and procedures - Summary of any issues, including the loss of confidential information and breaches of EU data laws - Details about stress test analysis
Risk Limitation	- Get access to virtual data room including documents and worksheets containing the requested data above - Engage DD advisory firms to take care of document procurement, review and analysis - Conduct industry benchmarking to compare financial KPIs	- Get access to internal documents from marketing departments listing customer circles and their data - Compare market trends described in this paper with analysis of CGM - If needed, re-negotiate terms and conditions with customers to increase competitive positioning	- Engage international law firm with specialization in IT and healthcare markets - Implement robust internal controls and incorporate favorable clauses in contracts - Secure intellectual property rights through patents, trademarks, and copyrights	- Intense testing of business model and sales channel - Check sensitivity of profitability and growth towards external factors such as increase in operating costs or decrease of purchase prices - Implement hedging against higher material expenses, inflation and other externalities	- Conduct regular security audits and penetration testing to identify by external IT security firms such as CrowdStrike - Develop and maintain a proactive relationship with both the EU and national authorities to ensure compliance with regulatory frameworks
	Advisor Circle¹⁾ Risk Level	Advisor Circle Risk Level	Advisor Circle Risk Level	Advisor Circle Risk Level	Advisor Circle Risk Level

Sources: DePamphilis (2010), Patel (2023), Delotte, PwC, A&M, Bain & Company, BCG, McKinsey & Company, Hogan Lovells, Clifford Chance, Skadden, LEK, Capgemini, Accenture, Crowdstrike

Notes: 1) All advisor circles have been chosen based on the specific knowledge and skills of the respective firms

08



Appendix

08.1



Company Overview



All MDs have many years of healthcare (IT) experience and show a long-term commitment to CGM – the supervisory board, particularly the Gotthardt family, must be convinced of the sale, as their word is directional

Managing directors

- 

Michael Rauch | CEO (since 05/2023), CFO (since 09/2019) and Member of the Administrative Board
Prior to his role at CGM, Michael Rauch worked as the CFO at Douglas in Düsseldorf. Before this, he spent 16 years at the Henkel Group in various finance and strategy roles, including several years as the CFO for Adhesives Technologies and Beauty Care. He began his professional career as a consultant at KPMG. In addition to being a business graduate, he is an MBA, LL.M. and CMA, and has amongst others worked in China, Sweden and the UK for a number of years
- 

Emanuele Mugnani | Managing Director AIS Europe (since 02/2022)
Emanuele Mugnani joined CGM Italy Group in 2014 as General Manager of Pharmacy Information system in Italy. As of 2019, he has held the role of Senior Vice President within the Pharmacy Information Systems Europe division. Emanuele Mugnani holds a degree in Electronic Engineering from Politecnico di Milano. Prior to his tenure at CGM, he served as the Managing Director for a worldwide leader in IT Solutions for Retail and Hospitality and Senior Manager at Accenture
- 

Dr. Eckart Pech | Managing Director CHS (since 06/2020)
Previously, Dr. Pech was a member of the Management Board at Allianz Technology SE in charge of the Allianz Group's global IT platforms. Prior to this, he was CIO¹⁾ and member of the executive board at Telefónica Deutschland AG, where he was responsible for the operation and development of IT platforms. Dr. Pech holds a doctorate from the University of the German Federal Armed Forces in Munich as well as a degree in business administration from the University of Bayreuth
- 

Hannes Reichl | Managing Director Inpatient and Social Care (since 06/2020)
Hannes Reichl has held diverse management roles since joining CGM in 2007, contributing to the growth of CGM's Central Eastern Europe and Middle East region. Besides the operational management, his work focused on strategic business development and post-merger integration. Following his studies in Informatics and Information Management, Hannes Reichel gained valuable professional experience at several Austrian companies that are all today part of CGM
- 

Dr. Ulrich Thomé | Managing Director AIS DACH (since 08/2023)
With his position as Managing Director of AIS DACH, Dr. Ulrich Thomé can leverage his expertise from working more than 16 years in diverse leadership roles in the health and healthcare IT industry. These roles include Chief Strategy Officer in the German segment of the Zur Rose Group, Board Member of ARZ Haan AG, and a longstanding Managing Director at BFS health finance. Ulrich Thomé pursued business administration studies and attained his doctorate from the University of Cologne

Sources: Company information
Notes: 1) Chief Information Officer; 2) University hospital Heidelberg; 3) Approximated number of shares, based on the percentage share

Administrative board

- 

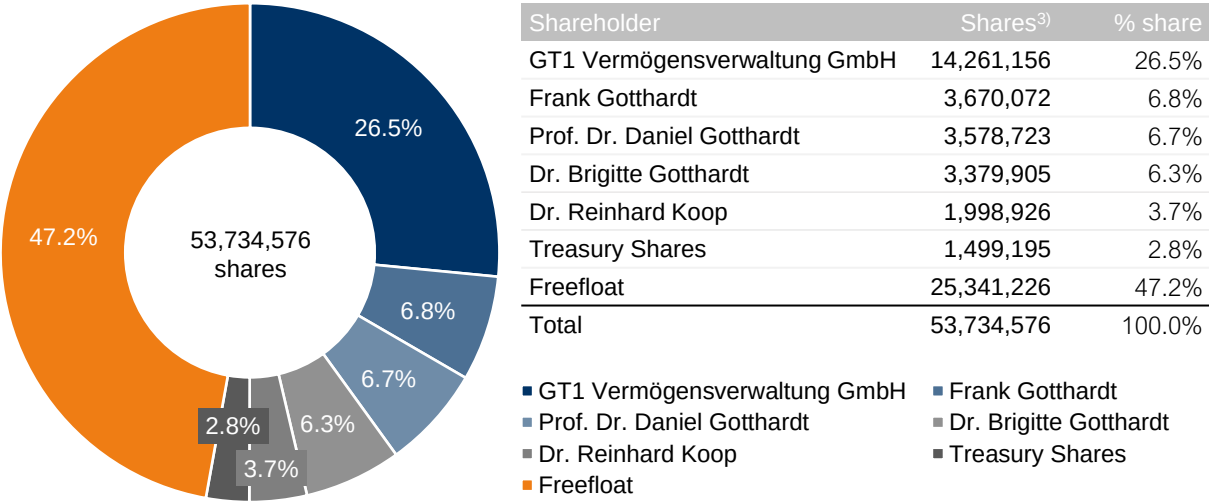
Frank Gotthardt | Founder of CGM and Chairman of the Administrative Board (since 06/2020)
Prior: CEO of CGM (1987–2020) | Founder and CEO of Gotthardt Computer, which acquired all ordinary shares of listed Compudent in 1992, merged with it, and it renamed CompuGroup Holding in 1997
- 

Dr. Klaus Esser | Vice Chairman of the Administrative Board (since 06/2020)
Prior: Member and later Chairman of the Supervisory Board at CGM (2014–2020) | Managing Director at the growth stage and tech-focused private equity corporation General Atlantic (2000–2014)
- 

Prof. (apl.) Dr. med. Daniel Gotthardt | Member of the Administrative Board (since 06/2020)
Prior: CEO at Gotthardt Healthcare Group (since 2018) | Member of the Supervisory Board at CGM (2003–2020) | Various positions at the UKHD²⁾, most recently as Managing Senior Physician (2004–2017)
- 

Stefanie Peters | Member of the Administrative Board (since 07/2020)
Prior: Founder & CEO of growth consulting firm enable2grow (since 2011) | Director European Business Development at US high-growth startup Reputation.com (2008–2018) | Consultant at BCG (1999–2006)

Shareholder structure





CGM’s core software portfolio consists of a limited set of core software catering to each of its diverse customer groups – various seamlessly integrable segment- and country-specific add-on modules complement CGM’s customizable software offering

Overview of software portfolio

	Software functionalities	Software portfolio (excerpt)	Further areas of activity
Ambulatory Information Systems (AIS)	- Practice IT infrastructure and service - Patient care and documentation - Efficiency and billing - Calendar function - Practice organization and quality management - Data storage and archiving	Germany CGM ALBIS CGM MEDISTAR CGM TURBOMED CGM M1 PRO DATA VITAL CGM XDENT CGM Z1.PRO CHREMASOFT Italy CGM STUDIO INFANTIA PROFIM XDENT >10 software products in Germany, supplemented by regional offering	Laboratory Post-acute care Specialist health Institutions/practitioners
Hospital Information Systems (HIS)	- Clinical IT infrastructure and service - Patient portal - Materials management and logistics - Image and content management - Telemonitoring and archiving - DRG controlling and coding - Intelligent infection prevention and surveillance	Germany¹⁾ CGM CLINICAL CGM MEDICO MetalPSS H&S Telemonitoring CGM Clinical Archive MetaKIS AESCUDATA Leading software portfolio in DACH, Spain, Poland, and Sweden	Occupational medicine and safety Pharma industry
Pharmacy Information Systems (PCS)	- Inventory management - Cash register - Personnel management - Rights assignment - Invoicing, price and article information - Price and article information - Reports and analytics - Integration of pharmacy networks - Route optimisation and real-time tracking for courier services	Germany CGM LAUER AESCUDATA Italy WEBCARE WINGESFAR PHARMASTORE CGM E-PHARMANET MULTIPHARMACY APODESK 10 base software products, supplemented by specialist add-on modules	Health insurers Social institutions
Consumer and Health Management Information Systems (CHS)	- Video consultation for online doctor's appointments - Online appointment scheduling - Telematics infrastructure integration - Patient engagement - Data warehouse services - Drug therapy safety checks - Real-time medical knowledge	INSIGHT HEALTH CLICKDOC GHG Praxisdienst eisTIK ifap m.Doc docmetric Data- and patient-centric solutions and brands building on propriety software	Various inter-connectable add-on modules Data protection and data security solutions

Sources: Company information
Notes: 1) Summarising different diagnosis and procedure combinations into groups to approximate hospital expenditures

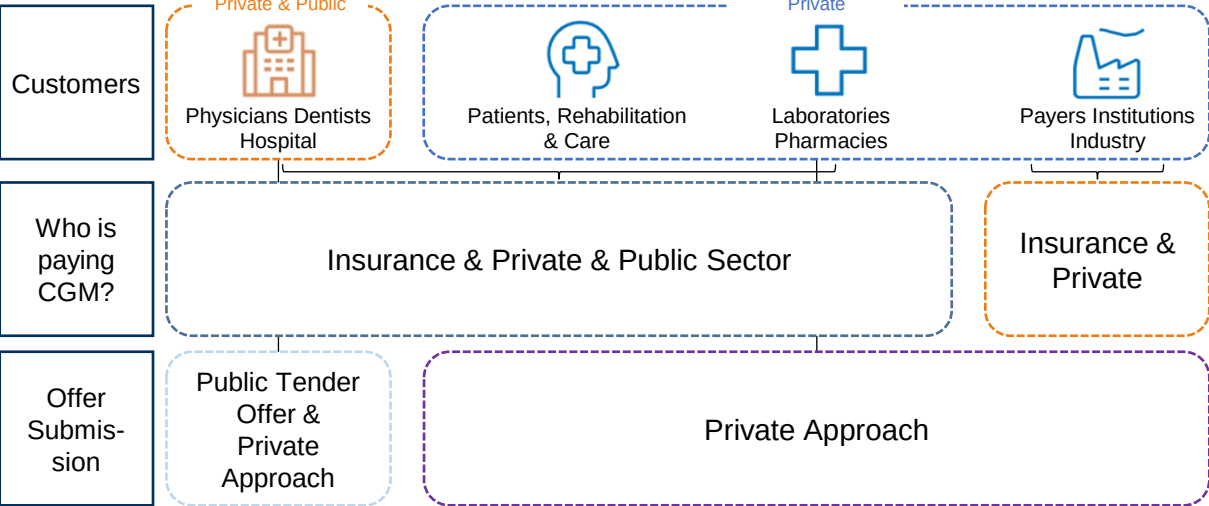


With a strong foothold in the DACH region and well-equipped to scale amidst barriers to entry and digital evolution, CGM must remain attentive to evolving regulations and the potential for reduced government funding in the future

CGM’s uniqueness

- 1 **Diverse Product Portfolio:** CGM offered a comprehensive suite of healthcare IT solutions, including AIS, HIS, PCS & CHS products. This diverse product portfolio allows it to cater to a wide range of healthcare providers' needs
- 2 **Customer Base:** CGM derives 65% of its revenue from recurring sources, primarily from customers who face significant switching costs due to their reliance on CGM's comprehensive system solutions making customer retention more secure. CGM serves a broad customer base, including doctors, pharmacists, patients, hospitals, and insurers
- 3 **Research & Development:** 29% of CGM's workforce is dedicated to R&D for creating new software products which is well above industry standards – further, CGM has recently invested heavily in increasing their workforce to be well positioned for additional growth

Customer circle, the paying parties & offer submission



SWOT analysis

Strengths

- High entry barriers:** Most business sections are protected by entrance barriers
- Investments:** Heavy recent investments in strong workforce to support anticipated growth – no need to search for skilled workforce in near future
- Recurring revenue:** High switching costs secure the basis of their customers and ensure stable recurring revenue streams
- Among global market leaders** in all segments

Weaknesses

- Intangible assets:** High level of goodwill compared to equity
- Regulation:** Dependence on increasing regulation for further growth
- Inflation:** Rising wage levels threaten the business' level of growth
- High entry barriers:** Most business sections are protected by entrance barriers
- Lobbyism:** Aligning the interests of CGM's diverse customer base is time-consuming

Opportunities

- Digital transformation:** Ongoing digital transformation in healthcare will increase the overall market
- Telemedicine growth:** COVID-19 accelerated the use of telemedicine – leveraging this development can drive growth
- Telematic infrastructure:** Should CGM establish itself as a service partner for the German state, it would ensure substantial recurring revenues

Threats

- Political support:** Potential loss of financial support in digitization of healthcare in case of government changes
- Substitution risk:** CGM is under pressure to innovate, as once customer have moved to competitors they are locked-in with them due to high switching costs
- Cybersecurity Risks:** CGM must ensure CAPEX- and working capital-intensive standards of data security

While CGM could profit from the ongoing digital transformation of the digital healthcare market, the company must be prepared of changing regulations that could endanger their current high level of growth

Sources: Company information, Annual Report 2022



CGM is most present in Germany and Western Europe with most of its add-on module and CHS businesses being consolidated under the German holding company – adherence to various regional regulations necessitates CGM to operate through distinct regional entities

Overview of subsidiaries (excerpt)



Sources: Company information



The identification of industry experts and potential consultants defines who should be on board during and after the acquisition of CGM – the direct consultation with rating analysts before the investment is essential to streamline the M&A process

Mirko Maier¹⁾

Stefan Jahnert

Senior Investment Analyst Technology – LBBW Landesbank Baden-Württemberg



- Mr. Maier holds the position of Senior Investment Analyst in the Equity Research division at Landesbank Baden-Württemberg, specializing in the technology sector
 - His expertise is rooted in a deep understanding of market trends, financial metrics, and the operational strategies of technology firms
 - He has been documenting CGM’s development since their IPOs regularly publishing reports on their business
 - Mr. Maier is a renowned expert for software and technology companies in Germany
- Landesbank Baden-Württemberg could be engaged as an M&A advisor to handle the acquisition process in a leading position



Managing Director Software & Platforms DACH – Accenture Germany



- Mr. Jahnert has amassed over 15 years of experience in the software industry, with a significant portion of that time—six years—dedicated to Accenture
 - His tenure at Accenture is preceded by a period at Atos, an established IT consultancy firm
 - Mr. Jahnert’s ability to navigate the complexities of the software market has proven instrumental in developing strategies that cater to the unique needs of the German market
 - His strategies are not only designed to boost the financial performance of companies but also to strengthen their market position and foster sustainable growth
- Accenture could be engaged as a consultant after the acquisition of CGM to prepare the firm for the upcoming phase of growth and margin improvements



Susanne Johna

Ingo Morell

1st Chairwoman, internist, hospital hygienist and health economist, senior physician at St. Josef-Hospital Rheingau in Rüdesheim



- Mrs. Johna is the chairwoman of the Marburger Bund, Germany’s largest and most renowned doctor’s union
 - The Marburger Bund, actively lobbies for the betterment of physicians’ professional lives
 - A key part of her role involves securing the necessary funding to propel the digital revolution in medical centers, which is crucial for the advancement of healthcare services.
- Hiring Mrs. Johna could help CGM to perfectly adjust their products to doctor’s needs and gain their acceptance



President of the Deutsche Krankenhausgesellschaft, Managing Director Maria Theresia Bonzel Foundation



- Mr. Morell is the President of DKGEV, Germany’s largest lobbying association for hospitals
 - With a forward-looking vision, he is a strong proponent of digitizing hospital processes
 - Mr. Morell understands that the integration of digital technologies is not just a matter of keeping pace with advancements but is also crucial for improving the efficiency, accuracy, and patient experience in healthcare delivery and could therefore be a strong supporter of CGM’s solutions
- With Mr. Morell as a consultant, CGM could empower its influence on the public funding of digital solutions for hospitals and the acceptance of this process within hospital (corporations)



Sources: Landesbank Baden-Württemberg, Accenture, Marburger Bund, Deutsche Krankenhausgesellschaft
Notes: 1) In an interview key characteristics of CGM and the market have been discussed with Mr. Maier

08.2

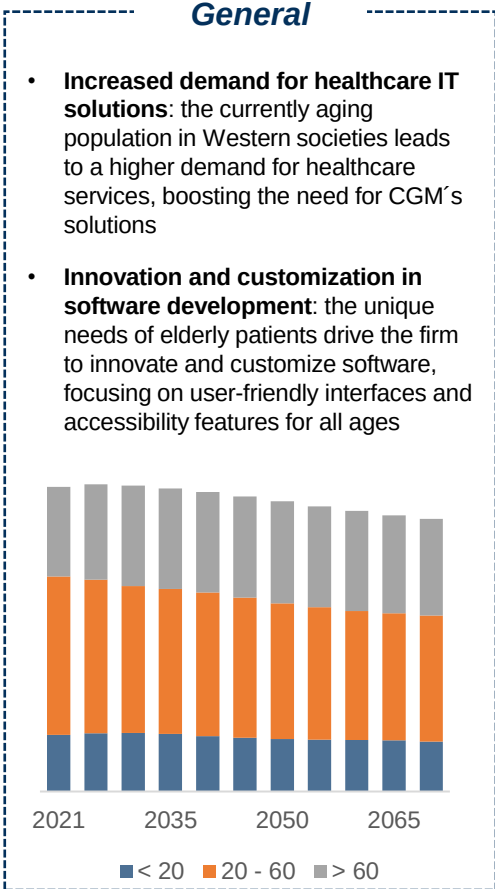


Market Environment



General Economic Overview: Current high inflation impacts operational costs, prompting a strategic shift towards different revenue models and prioritizing sustainability initiatives to justify higher prices while an ageing population increases demand for certain industries

	High inflation	Focus on SaaS models	AI development and implementation	Demographic change
Departments	Finance & Accounting Pricing Human Resources	Finance & Accounting Pricing Sales & Marketing	Sales & Marketing R&D Human Resources	General
Trend analysis	• Inflation leads to higher expenses for labor, infrastructure, and other operational aspects, impacting profit margins • Customers may face budget constraints due to inflation, potentially affecting their purchasing decisions • Inflation can impact investment strategies and funding, making it more challenging to secure capital for growth and innovation, especially in new technologies or markets	• Software as a Service represents a move away from one-time software purchases to subscription-based models, offering predictable, recurring revenue for CGM • The change towards SaaS models reflects a shift in customer needs, favoring solutions that offer scalability, flexibility, and reduced upfront costs • Increased focus on Cloud Infrastructure as SaaS models	• AI algorithms are increasingly utilized for developing software and creating new solutions – this has a strong influence on the development of R&D departments in software firms • Incorporating AI could enable CGM to gain a competitive edge by innovating in development, customer service, and market analysis, leading to more tailored and advanced solutions	• Increased demand for healthcare IT solutions: the currently aging population in Western societies leads to a higher demand for healthcare services, boosting the need for CGM's solutions • Innovation and customization in software development: the unique needs of elderly patients drive the firm to innovate and customize software, focusing on user-friendly interfaces and accessibility features for all ages
Assessment	• Diversifying Revenue Streams by expanding into new markets or sectors and offering a broader range of products or • Investing in Innovation by focusing on R&D to develop new, more efficient technologies and solutions to lower operational costs	• Communicate revenue model change helps ensuring a smooth transition for existing customers • Developing a pricing strategy that aligns with customer expectations and value delivery • Investing in robust cloud infrastructure to ensure service reliability, scalability, and security	• Addressing ethical concerns, such as privacy, bias, and transparency, and comply with relevant regulations and standards and will further increase acceptance • Investing in the right talent and expertise, including AI specialists and data scientists, is necessary to develop, deploy, and maintain effective AI systems	
Impact				



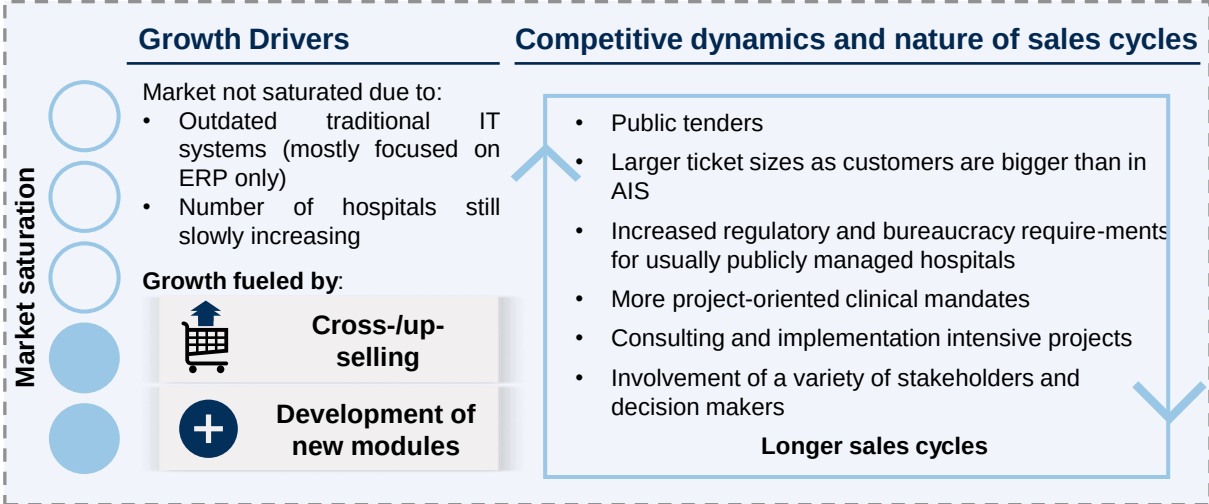
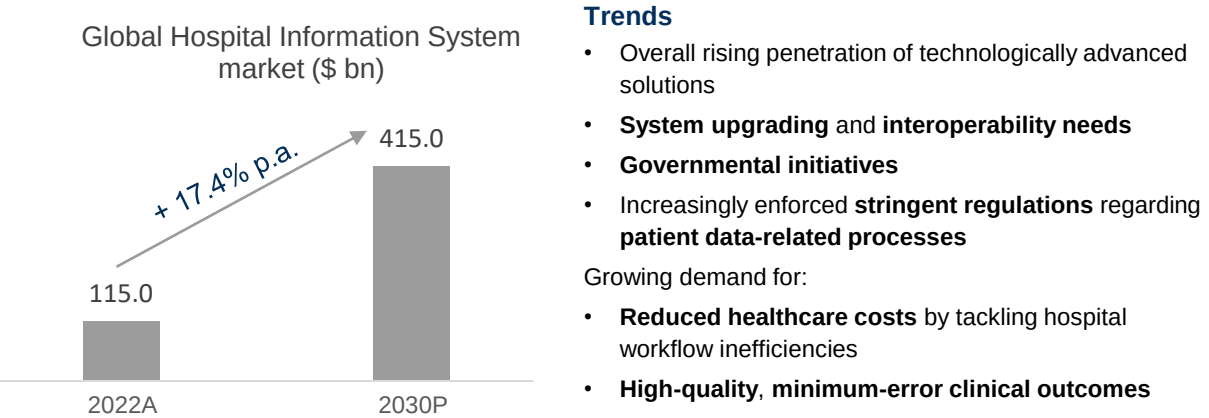
Sources: Bundeszentrale für politische Bildung, Financial Times, Forrester



HIS deep dive: A diverse HIS customer base combined with the driving forces of cross and upselling, seamlessly aligns with CGM's strategic positioning as a modular one-stop-shop – HIS revenues Are the most project-based revenues within CGM's markets

Hospital Information Systems are one component of health informatics addressing the **administrative, financial, and clinical** aspects of **hospital operations**. They aim to **provide essential patient health and visit history information** efficiently and centrally **through electronic data processing**, ensuring it is readily accessible when and where needed and thereby **enhancing care coordination**

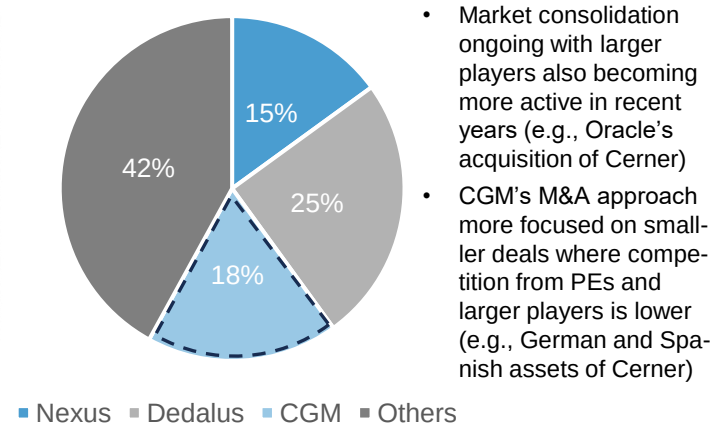
CGM's addressable HIS market



CGM's HIS customer footprint



HIS market shares in Germany



CGM's competitive advantages

1

Cloud-based, modular one-stop shop

CGM's advanced, third-generation HIS software G3/CGM Clinical positions the company as an attractive and effortless digitization partner for financially strained and understaffed hospitals. It expands CGM's footprint in the cloud-based health IT sector

2

Strong German and EMEA presence

Leading positions in Sweden (#1) as well as DACH, Spain¹, and Poland (#2), and orders of >EUR 90m via German KZHG show CGM's relevance in this promising market and entail considerable upside potential in the medium-term, as much of the of the EUR 4.3bn funding are still being processed

Sources: Company Information, Grand View Research, BNP Paribas, Statista
Notes: 1) Public hospitals



PCS deep dive: Regulatory updates and increased consolidation of pharmacies resulting in interlinkage needs outweigh the effect of increased pharmacy closures – CGM’s success in Italy and Germany demonstrates its ability to penetrate regionally dominated markets

Pharmacy Information Systems capture, manage, and archive **patient- and store-related data**, which is subsequently used to **streamline** and **optimize pharmacists’ workflows** such as patient tracking, decision support, medication dispensing, reorder and point-of-sales processes, report generation, billing, inventory management, and maintaining quality assurance

CGM’s addressable PCS market

Global Pharmacy Information Systems market (\$ bn)

Year	Market Size (\$ bn)
2022A	23.7
2032P	57.9

Trends

- Pharmacies seeking updates to **outdated**, paper-based management **systems**
- Governments’ **push for digitization**
- Progressing health systems in developed as well as emerging nations, **expanding medication demand**
- Heightened pressure for pharmacies to cater to a **broader range of customers and treatments**
- Changing customer preferences towards **contactless** and **timely drug delivery**

- Trend **pharmacy conglomerates** and growing **closure of standalone pharmacies**
- Shift of pharmacists’ roles towards increased **customer interaction** and the provision of **clinical advice**

Growth Drivers

Market saturation

Rather saturated market with decreasing and sticky customer base
Growth fueled by:

- Cross-/up-selling**
- Regulatory updates**
- Price increases**

Competitive dynamics and nature of sales cycles

- Highest level of market fragmentation within CGM’s business segments
- Market primary controlled by regional players in each country

- Comparable to nature of AIS sales cycles
- No public tender processes
- Small ticket sizes
- Usually, customer = buyer = user
- Short implementation times

Short sales cycles

E-prescriptions in Germany as PCS/CHS boost and thread

Introduction of e-prescriptions for individuals covered by statutory health insurance

January 2022

Introduction of digital redeeming possibilities for statutory insurance e-prescription users

January 2023

Draft act DigiG²: Compulsory e-prescriptions from 01/2024

August 2024

- + Compulsory e-prescriptions to further trigger pharmacists’ awareness and efforts for digitization
- + Operation through TI¹ as a secure link between doctors, patients, and pharmacies to boost CHS business
- Thread of accelerated shift to online pharmacies

Leading market positions in DACH core regions

#4 market position

~20% market share

~4k pharmacies served

#1 market position

>50% market share

>10k pharmacies served

Sources: Company Information, Precedence Research, Data Bridge Market Research, BNP Paribas, Deutsche Apothekerzeitung, Gleiss Litz
Notes: 1) Telematics infrastructure, 2) Act to accelerate the digitalisation of the healthcare system



US market: With impressive financial and user activity KPIs, CGM's US business unlocks significant and valuable future growth potential – following strategic M&A, CGM solidified its position as leader in the US AIS and LIS markets promising foundation for future growth

US market healthcare IT market

Case study – CGM US expansion

AIS and RCM Acquisition of eMDs	LIS Acquisition of SchuyLab	LIS Acquisition of AP Easy	RCM Acquisition of ACS	LIS Acquisition of Medicus LIS
+ 32,000 facilities + 300 distribution partners	Positioned CGM as the single largest LIS provider in US	+ 700 laboratories	+ 1,000 laboratories	+ 1,000 laboratories
Nov 2020	Dec 2020	Feb 2022	Jun 2022	Dec 2022

• CGM has demonstrated its ability to expand into a highly competitive market through targeted acquisitions

• Today, CGM is the **largest** installed **independent laboratory base** and one of the **top four vendors** for ambulatory **EHR** and **practice management software**, as well as **RCM services** in the US

Status quo of CGM's US business activity

Tripled revenues
(from 2019 – 2022)

6% organic growth
(H1 2023 yoy)

80% recurring revenue share

Local product/software offering

Electronic Health Record and Practice Management

CGM APRIMA

Revenue Cycle Management

ARIA

Telehealth

CGM ELVI

Clearinghouse Portfolio (Reimbursement)

CGM eMEDIX

Laboratory Information Systems Suite

CGM LABDAQ

Web-based, SaaS practice mgmt. system

CGM webPRACTICE

CGM-specific user KPIs

1.5m eligibility checks/month

1.5m appointments/month

100m lab tests/month

>51m e-prescriptions/year

>24m claims per year

Sources: Company Information, The Brainy Insights

08.3



Value Creation

Value creation sensitivity: Evaluating the initiatives' resilience, we find a robust defense against suboptimal realization results, limiting the maximum impact on the MOIC to a decrease of just 0.4x

Impact of organic revenue growth development on MOIC (Exit 2028F)

		Organic Revenue Growth 2022A-2028F				
Exit Multiple	①	6.6%	7.1%	7.6%	8.1%	8.6%
	10.9x	3.3x	3.3x	3.4x	3.4x	3.5x
	11.9x	3.3x	3.4x	3.5x	3.5x	3.6x
	12.9x	3.4x	3.5x	3.5x	3.6x	3.7x
	13.9x	3.4x	3.5x	3.6x	3.7x	3.8x
	14.9x	3.5x	3.6x	3.7x	3.8x	3.8x

Commentary

- Organic revenue growth: Based on organic revenues of EUR 1,129.7m in 2022, we assessed the impact on the MOIC for different organic revenue growth rates (-1% to +1%)
The analysis shows that the impact of organic topline growth on our MOIC is moderate – a decrease/ increase of 0.5% in revenue growth leads to a decrease/ increase of the MOIC by 0.05-0.1x (if exit multiple stable)
- Organic EBITDA margin improvement: The analysis is based on organic revenues in 2028 of EUR 1,755.3m, equal to an annual revenue growth of 7.6% between 2022 and 2028
The impact of the organic EBITDA margin development on our MOIC is high – a decrease/ increase of 1.5% of the EBITDA margin at Exit results in a decrease/ increase of the MOIC by ~0.2x (if exit multiple stable)
- Acquisition of Carecloud (M&A): Based on the assumption that Carecloud generates revenues of EUR 184.3m in 2028, equal to an annual revenue growth 5.7% between 2022 and 2028
Given the rather small share of Carecloud's EBITDA on total EBITDA at Exit, the impact of a change in the EBITDA margin is low – a decrease/ increase of 2.0% in EBITDA margin at Exit leads to a decrease/ increase of the MOIC by 0.02-0.03x (if exit multiple stable)

Impact of organic EBITDA margin development on MOIC (Exit 2028F)

		Organic EBITDA Margin 2028F				
Exit Multiple	②	23.9%	25.4%	26.9%	28.4%	29.9%
	10.9x	3.1x	3.2x	3.4x	3.6x	3.7x
	11.9x	3.1x	3.3x	3.5x	3.6x	3.8x
	12.9x	3.1x	3.3x	3.5x	3.7x	3.9x
	13.9x	3.2x	3.4x	3.6x	3.8x	4.0x
	14.9x	3.2x	3.4x	3.7x	3.9x	4.1x

Impact of Carecloud EBITDA margin development on MOIC (Exit 2028F)

		Carecloud EBITDA Margin 2028F				
Exit Multiple	③	22.2%	24.2%	26.2%	28.2%	30.2%
	10.9x	3.4x	3.4x	3.5x	3.5x	3.5x
	11.9x	3.4x	3.5x	3.5x	3.5x	3.5x
	12.9x	3.5x	3.5x	3.5x	3.6x	3.6x
	13.9x	3.5x	3.5x	3.6x	3.6x	3.6x
	14.9x	3.5x	3.5x	3.6x	3.6x	3.6x

Notes: 1) Assuming that all other variables are stable

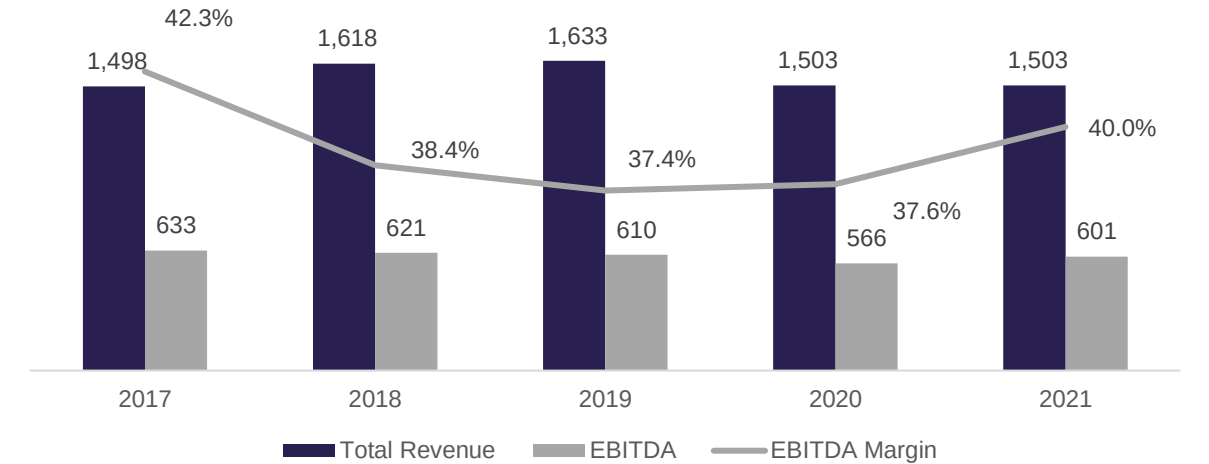


Attractive Target Veradigm: A US-based data-driven healthcare solution provider combining data-driven clinical insights with software tools for practices, hospitals, and other healthcare providers with practice management and electronic health record applications

Company description

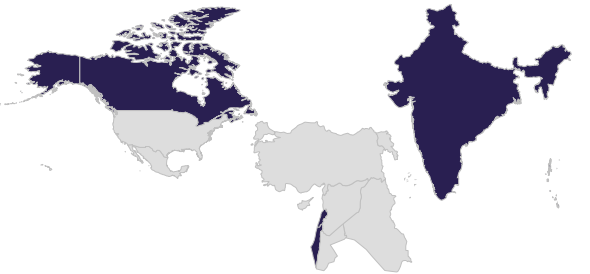
- Veradigm** is engaged in providing physician practices, hospitals, and other healthcare providers with practice management and electronic health record technology. They also offer products for patient engagement, care coordination, financial, and analytics technology
- Operational Segments:** Veradigm's technology is utilized by over 180,000 physicians, with products in 2,700 hospitals and 13,000 extended care organizations
- Revenue Streams:** Veradigm's revenue comes from various healthcare technology solutions, including practice management and EHR systems, patient engagement tools, and analytics services
- Corporate Structure and Presence:** Founded in 1981 as Allscripts and headquartered in Chicago, Illinois, the company underwent significant growth through mergers and acquisitions, including the notable merger with Eclipsys and the acquisitions of dbMotion, Ltd., Jardogs LLC, and ZappRx
- Market Access:** Veradigm's established presence in the US telemedicine sector would provide CompuGroup Medical with an immediate foothold in the US
- Technological Synergy:** Integrating Veradigm's products with CGM's existing EHR and patient engagement tools could create a powerful, comprehensive healthcare platform placing CGM in the US

Financial development (in USDm)



Geographic presence

- Veradigm** is operating assets in the US, Canada, Israel and India
- The company is headquartered in **Chicago, IL**, with >90% of revenues originating from North America



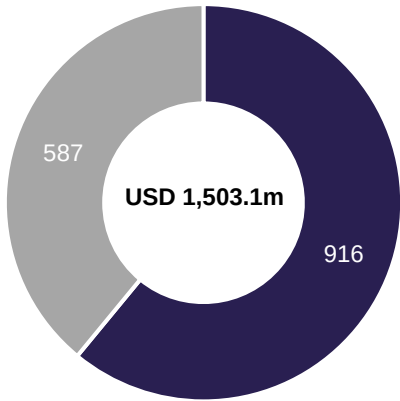
Product portfolio

95% of revenues originating from the US
80% of that are recurring
330K healthcare providers served
+600m electronic prescriptions



+180m patients

Revenue split



Product	Revenue	% share
Delivery, support and maintenance	916.2	60.9%
Client services	586.9	39.1%
Total	1,503.1	100.0%

- Revenues** are split into two components
- Sales of the proprietary software are either as a **direct license sale** or as a **SaaS model**
- Client services** are software support and maintenance for existing customers

■ Delivery, support and maintenance ■ Client services

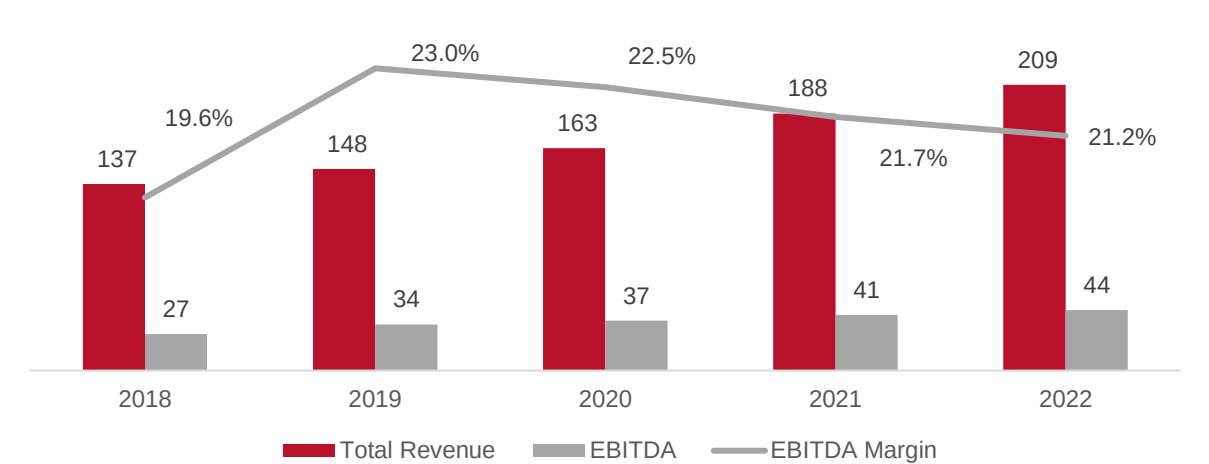
Sources: Company website, Annual Reports

Attractive Target Nexus AG: A German competitor with strong revenue growth, outstanding margins and great liquidity is a well-fitting target for CGM’s growth aspirations in Germany

Company description

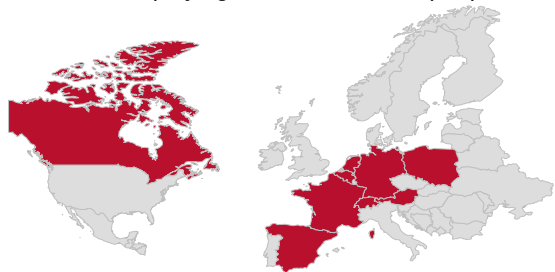
- **Nexus AG** is developing software solutions and IT services for the healthcare industry, serving individual doctor’s offices, multi-specialty hospitals, pharmacies, and partnering with pharmaceutical and insurance companies. The company has a significant presence in Europe, with a notable focus on the German market, while also expanding its reach in the North American market
- **Operational Segments:** The company's operations are segmented to cater to distinct customer needs: i) Ambulatory Information Systems (AIS), ii) Hospital Information Systems (HIS), iii) Consumer and Health Management Information Systems (CHS), and iv) Pharmacy Information Systems (PCS)
- **Revenue Streams:** Nexus AG's revenue is derived the sale of software licenses, ongoing software maintenance services, professional services, and hardware sales. Additional revenue comes from advertising, digital marketing services, and data analytics solutions
- **Corporate Structure and Presence:** With its headquarters situated in a key European tech city, Nexus AG has a global footprint with offices in over 20 countries, employing a workforce of approximately 1700 professionals, including 560 dedicated to software development and maintenance
- The company has a user base of around 9,323 customers and maintains a public listing with significant ownership held by the founder's family and key investors

Financial development (in EURm)



Geographic presence

- **Nexus AG** is operating in eight European countries and in North America
- The company is headquartered in **Donaueschingen**, with **18 total offices** in Germany – 10 more offices are located in Europe and the US employing more than 10,000 people



Customer circle

9,323 customers

2,543 in radiology

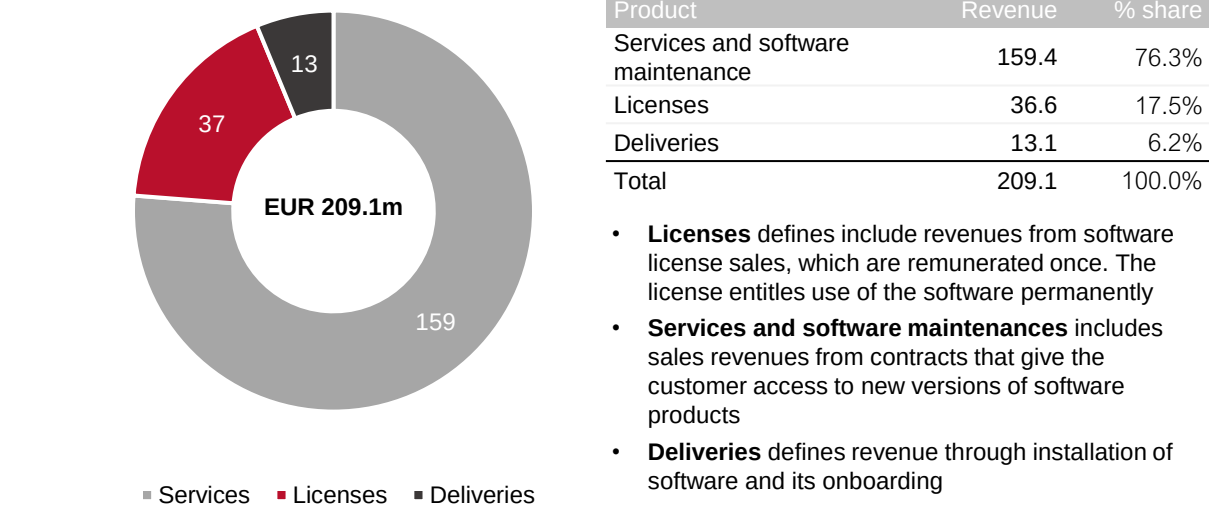
516 in cardiology

453 in pathology

985 retirement homes

in **78** countries

Revenue split



Sources: Company website, Annual Reports

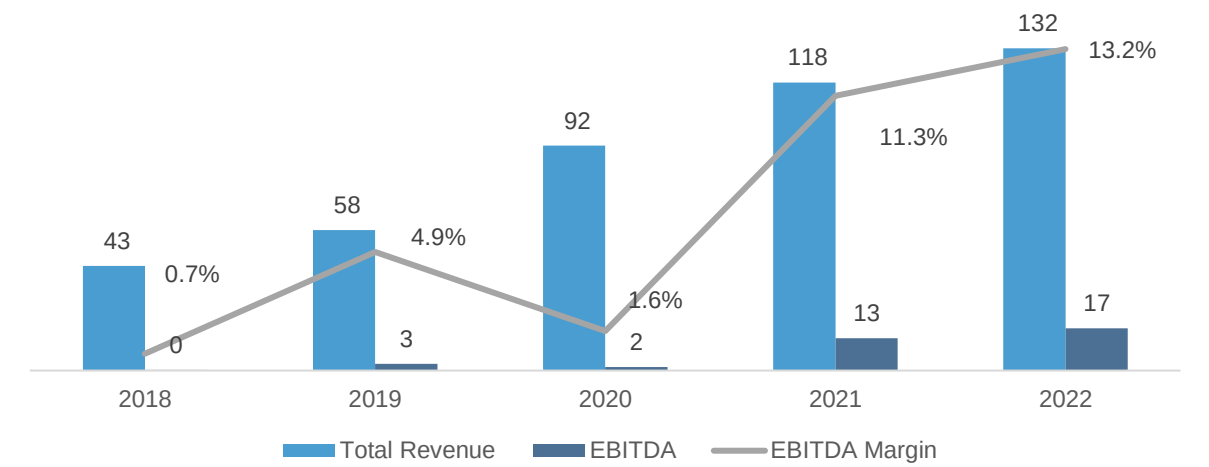


Attractive and feasible target CareCloud: A US-based RCM, EHR, and cloud software-focused healthcare IT company present in the entire US and with promising revenue growth represents an attractive M&A target for expanding CGM's US business market share

Company description

- **CareCloud** is a NASDAQ-listed American healthcare IT company that delivers cloud-enabled software focused in redefining the healthcare revenue cycle and consulting services to healthcare providers ranging from small medical practices to hospitals
- **Operational Segments:** CareCloud helps over 40,000 healthcare providers in approximately 70 medical specialties to grow their practices sustainably, reduce operational expenses, increase revenue collection, and improve patient experience
- **Revenue Streams:** CareCloud's mainly generates revenues through the sale of EHR, practice management, medical billing and administration, mobile application, patient engagement, telehealth, and business intelligence software
- **Corporate Structure and Presence:** The company was founded as Medical Transcription Billing Corporation (MTBC) in 1999 and renamed CareCloud Inc. in 2021. It and went public in 2014 and currently the has c. 4,000 employees, of which 400 are based in the US and the rest is globally distributed
- **Market Access:** CareCloud's strong presence in the US and its business focus on revenue cycle management as well as cloud-based software solutions seamlessly builds on CGM's US AIS footprint and future strategy

Financial development (in USD m)



Geographic presence

- **CareCloud's** business operations are focused on the US market
- The company is headquartered in **Somerset, New Jersey**

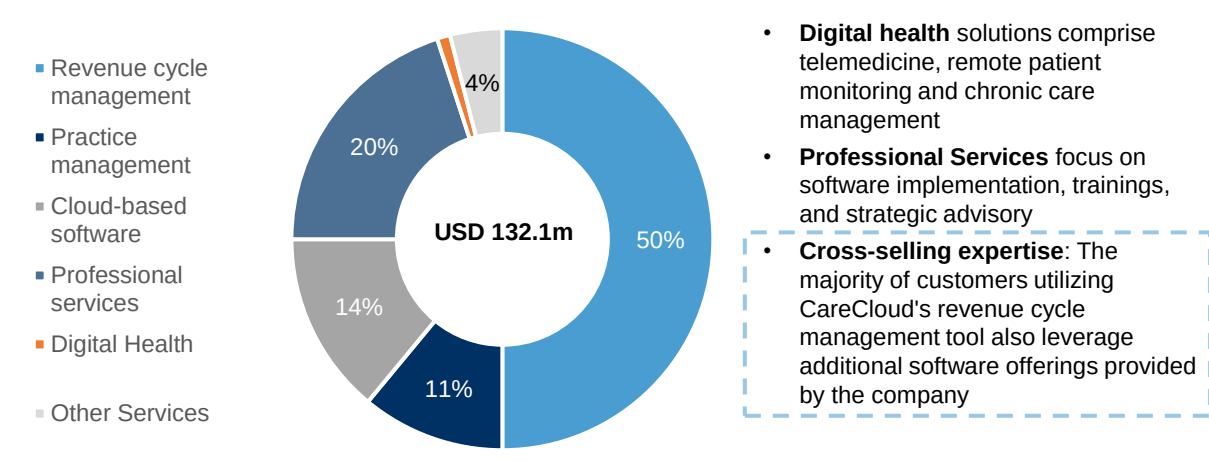


Customers in all 50 US states

Key characteristics

-  **>60%** of revenues originating from RCM and cloud-based solutions
-  **>40K** healthcare providers served
-  **\$4.2bn** annualized accounts receivable managed

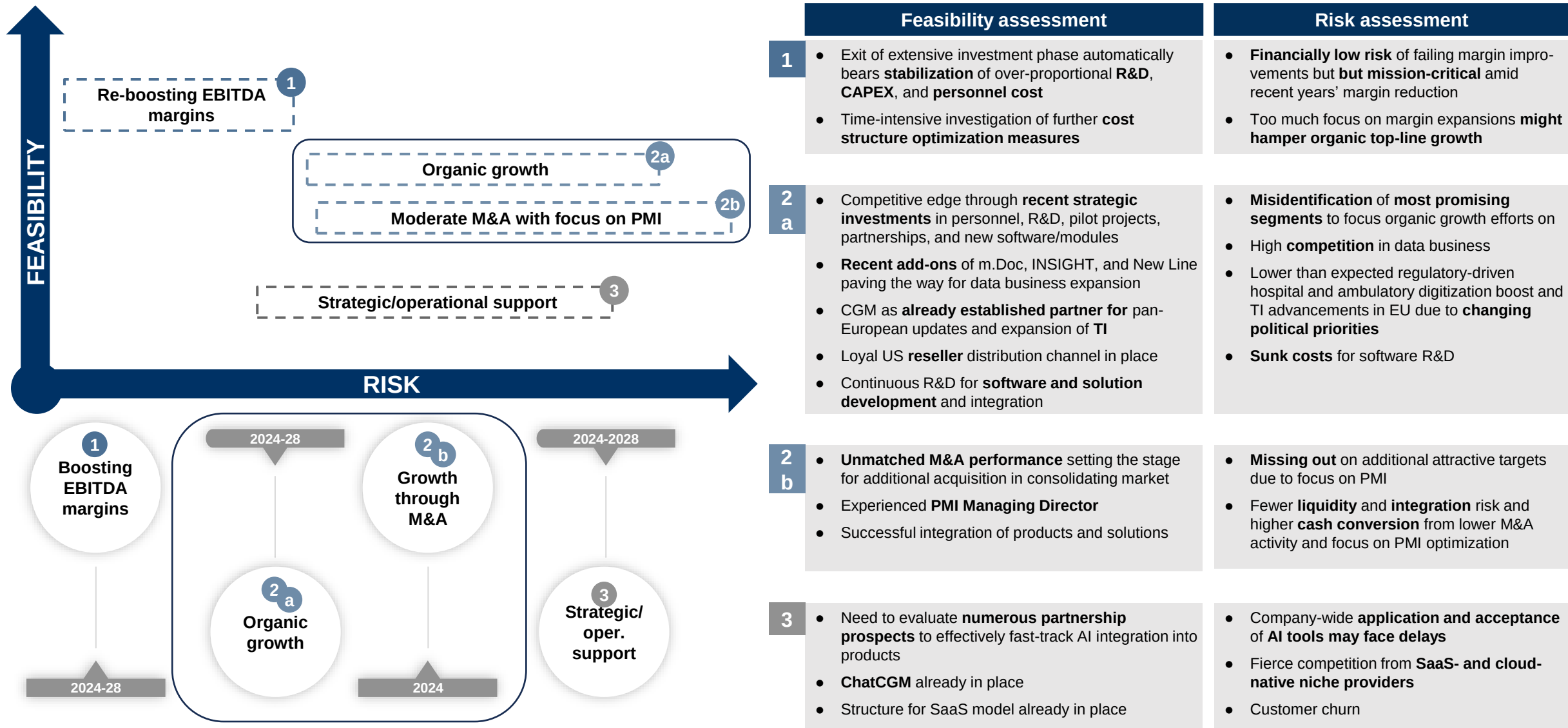
Revenue split



Sources: Company website, Annual Reports



Considering a two-dimensional evaluation of strategic actions, CGM’s primary focus should be on re-boosting margins, accelerating revenue growth, strengthening its presence in the US, and further development of cloud-enabled software and streamlined processes



Sources: Company information, Mergermarket

08.4

Valuation

Capital Structure

Returns



DCF: After creating a beta peer group consisting of seven German software companies, CGM's WACC has been determined at 9.6%, considering tax rates, equity costs, debt costs, and the debt-to-equity ratio

DCF assumptions							Commentary
Company Name	Equity Value	Total Debt	Levered Beta	Average Tax Rate	Debt to Equity	Unlevered Beta	- To determine the beta for CGM a peer group must be identified¹⁾ - This involves identifying a set of comparable companies that operate in similar industries and share similar financial and operational risks - The peer group provides a benchmark for assessing the systematic risk associated with CGM, as measured by its beta - For CGM, seven comparable companies have been identified, mostly software firms operating with DACH origins with an median unlevered beta of 1.06 - Companies included are adesso SE, ALSO Holding AG, Bechtle AG, Cancom SE, Nexus AG, Software AG and SoftwareOne Holding AG - This beta has to be levered as these firms have individual debt ratios different to CGM’s amount debt – the levered beta is 1.37 which is then used for the cost of capital calculation - The CAPM is used to determine the expected return on an investment, also known as its equity cost of capital which is then used to discount future cash flows - Applying the beta on the Equity Risk Premium and adding the Risk-Free Rate results in a cost of equity of 11.1% - The cost of debt of 6.8% is determined by adding the risk-free rate (10Y Bundesanleihe) on the spread (based on LT borrower credit rating) - The WACC is then calculated by weighing the cost of equity and cost of debt equivalent to the debt and equity ratio and applying the tax shield (based on a 30% tax rate) on it - Taking in all parameters the WACC of CGM is at 9.2%
adesso SE	601.8	219.6	1.48	27.6%	36.5%	1.17	
Also Holding AG	3,178.7	281.3	1.13	26.7%	8.9%	1.06	
Bechtle AG	5,417.8	523.2	0.85	28.5%	9.7%	0.80	
Cancom SE	942.7	123.6	1.24	31.0%	13.1%	1.13	
Nexus AG	834.4	29.0	0.77	25.5%	3.5%	0.75	
Software AG	2,307.3	657.5	0.74	30.0%	28.5%	0.62	
SoftwareOne Holding AG	2,923.2	84.4	1.40	29.0%	2.9%	1.37	
Average	2,315.1	274.1	1.09	28.3%	14.7%	0.99	
Median	2,307.3	219.6	1.13	28.5%	9.7%	1.06	
Median unlevered beta for CGM						1.06	
CGM debt to equity						42.6%	
Tax rate (5 Year Average)						30.0%	
Company levered beta						1.37	
Company levered beta peer group						1.50	
Assumptions		Cost of equity & cost of debt		WACC			
Tax rate (average)	30.0%	Risk-free rate	2.8%	Tax rate (average)	30.0%		
Risk-free rate	2.8%	Levered beta	1.37	Cost of equity (CAPM)	11.7%		
MSCI world market return (10Y)	8.8%	Equity risk premium	6.0%	Cost of debt (pre-tax)	6.8%		
Equity risk premium	6.0%	Cost of equity (CAPM)	11.1%	Equity risk premium	6.5%		
				% Equity	70.1%		
		10Y Bundesanleihe	2.8%	% Debt	29.9%		
		Spread	4.0%	WACC	9.2%		
		Cost of debt (pre-tax)	6.8%				



Sources: Refinitiv
Notes: 1) Peer group definition done by Refinitiv proposal and own research



DCF: Using the projected cash flows from the business plan and applying a growth rate of 2.0% on the terminal value, the DCF methods yields an EV of EUR 2,975m at a WACC of 9.2%

Free cash flow DCF (in EURm) ¹									Commentary																																																																																																														
	2023FC	2024FC	2025FC	2026FC	2027FC	2028FC	2029FC	2030FC	- The DCF valuation is based on the ability of the valued firm to generate cash in the future - The future cash availability is defined by CGM’s free cash flow (FCF) which has been projected until 2030 - The FCF projections are based on the bank case of the operational model also used for the LBO (without any M&A activities) - The terminal value of EUR 1,984.4m is calculated by applying the perpetuity growth rate of 2.0% on the unlevered FCF of 2030FC and discounting it with the WACC of 9.2% - The terminal value is 66.7% of the total enterprise value which is assumed to be a fair share - The PV of the FCF is 33.3% of the total enterprise value - The sensitivity analysis indicates a range in between EUR 2744.4m and EUR 3520.6m for different perpetuity growth rates (1.0% - 3.0%) and WACC (6.4% - 10.4%) - The EV to equity value bridge contains the deduction of all debt and debt-like items such as financial debt, pension provisions and minority investments and the addition of cash and cash-like items such as investments in associates - The indicated equity value is EUR 2,217.4m which results in an implied value per share of EUR 42.5																																																																																																														
EBITDA	253.5	283.7	312.1	337.4	372.4	412.7	459.9	511.5																																																																																																															
% margin	20.7%	21.5%	22.1%	22.4%	23.2%	24.1%	25.2%	26.3%																																																																																																															
Depreciation of PP&E and right-of-use assets	(46.3)	(47.8)	(49.6)	(51.3)	(52.3)	(53.4)	(57.1)	(61.0)																																																																																																															
EBITA	207.2	235.8	262.4	286.1	320.0	359.4	402.8	450.5																																																																																																															
% margin	16.9%	17.9%	18.6%	19.0%	19.9%	21.0%	22.1%	23.2%																																																																																																															
Amortization of intangible assets	(72.9)	(72.8)	(76.5)	(75.7)	(75.8)	(75.7)	(77.0)	(78.2)																																																																																																															
EBIT	134.3	163.0	185.9	210.4	244.3	283.7	325.9	372.3																																																																																																															
% margin	10.9%	12.4%	13.2%	14.0%	15.2%	16.6%	17.9%	19.2%																																																																																																															
Income taxes	(40.3)	(48.9)	(55.8)	(63.1)	(73.3)	(85.1)	(97.8)	(111.7)																																																																																																															
NOPAT	94.0	114.1	130.2	147.3	171.0	198.6	228.1	260.6																																																																																																															
Depreciation and amortization	119.2	120.6	126.1	127.0	128.1	129.0	134.0	139.2																																																																																																															
Capex	(82.6)	(88.8)	(91.5)	(90.2)	(96.0)	(102.4)	(109.1)	(116.3)																																																																																																															
Change in Net Working Capital	15.9	(4.5)	(3.1)	(3.7)	(3.2)	(0.5)	(0.2)	(0.0)																																																																																																															
Unlevered FCF	146.4	141.5	161.7	180.4	199.8	224.8	252.9	283.5																																																																																																															
% YOY growth		-3.4%	14.3%	11.5%	10.8%	12.5%	12.5%	12.1%																																																																																																															
PV of unlevered FCF		129.6	135.6	138.5	140.5	144.7	149.1	153.1																																																																																																															
Enterprise value calculation	in EURm	% of TEV	EV sensitivity						<table><tr><th colspan="2">EV sensitivity</th><th colspan="5">Perpetuity growth</th></tr><tr><th></th><th></th><th>1.0%</th><th>1.5%</th><th>2.0%</th><th>2.5%</th><th>3.0%</th></tr><tr><td>PV of FCF</td><td>991.0</td><td>33.3%</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>PV of terminal value</td><td>1,984.4</td><td>66.7%</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Enterprise value (EV)</td><td>2,975.4</td><td>100.0%</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Total financial debt</td><td>(821.7)</td><td>27.6%</td><td>6.4%</td><td>2,793.1</td><td>2,922.2</td><td>3,069.7</td><td>3,239.8</td><td>3,438.3</td></tr><tr><td>Pension provisions</td><td>(32.7)</td><td>1.1%</td><td>7.4%</td><td>2,754.3</td><td>2,879.3</td><td>3,021.8</td><td>3,186.0</td><td>3,377.0</td></tr><tr><td>Minority investments</td><td>(1.4)</td><td>0.0%</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Cash & cash equivalents</td><td>90.5</td><td>3.0%</td><td>8.4%</td><td>2,716.4</td><td>2,837.5</td><td>2,975.4</td><td>3,133.8</td><td>3,317.8</td></tr><tr><td>Investments in associates</td><td>7.3</td><td>0.2%</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Equity value</td><td>2,217.4</td><td>74.5%</td><td>9.4%</td><td>2,679.5</td><td>2,796.8</td><td>2,930.2</td><td>3,083.2</td><td>3,260.5</td></tr><tr><td>Shares outstanding</td><td>52.2</td><td></td><td>10.4%</td><td>2,643.5</td><td>2,757.2</td><td>2,886.3</td><td>3,034.1</td><td>3,205.0</td></tr><tr><td>Implied per share value</td><td>42.5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	EV sensitivity		Perpetuity growth							1.0%	1.5%	2.0%	2.5%	3.0%	PV of FCF	991.0	33.3%						PV of terminal value	1,984.4	66.7%						Enterprise value (EV)	2,975.4	100.0%						Total financial debt	(821.7)	27.6%	6.4%	2,793.1	2,922.2	3,069.7	3,239.8	3,438.3	Pension provisions	(32.7)	1.1%	7.4%	2,754.3	2,879.3	3,021.8	3,186.0	3,377.0	Minority investments	(1.4)	0.0%							Cash & cash equivalents	90.5	3.0%	8.4%	2,716.4	2,837.5	2,975.4	3,133.8	3,317.8	Investments in associates	7.3	0.2%							Equity value	2,217.4	74.5%	9.4%	2,679.5	2,796.8	2,930.2	3,083.2	3,260.5	Shares outstanding	52.2		10.4%	2,643.5	2,757.2	2,886.3	3,034.1	3,205.0	Implied per share value	42.5							
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Notes: 1) From DCF valuation, based on the Bank Case

CCA: Comparable companies are split into three buckets – each with different characteristics but all comparable to CGM resulting in a last twelve month multiple of **2.5 – 3.1x Sales** and **10.4 – 12.6x EBITDA¹⁾**

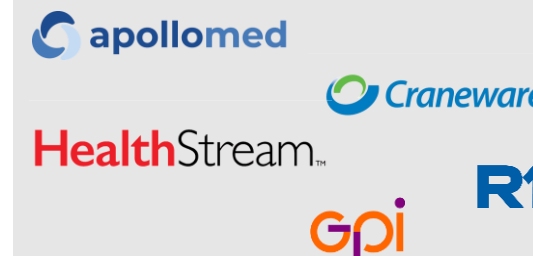
Historical EV multiples²⁾

GENERAL INFORMATION				CAPITALIZATION				EV/SALES				EV/EBITDA			
Company	Currency	Shares	EV	2020A	2021A	2022A	LTM	2020A	2021A	2022A	LTM	2020A	2021A	2022A	LTM
EHR / Care Pathways															
Equasens	EUR	15,033,281	906.2	5.3x	4.7x	4.2x	4.2x	6.4x	14.7x	13.4x	12.9x				
Cegedim	EUR	13,637,980	514.6	1.0x	1.0x	0.9x	0.9x	6.1x	4.7x	5.3x	4.8x				
Nexus	EUR	17,229,256	928.3	5.7x	4.9x	4.4x	4.0x	25.3x	22.8x	21.0x	19.1x				
CPSI	USD	14,205,461	294.7	1.1x	1.1x	0.9x	0.9x	8.5x	7.0x	6.3x	10.2x				
Median				3.2x	2.9x	2.6x	2.5x	12.5x	10.9x	9.9x	11.5x				
ERP Finance & HR															
Craneware	USD	34,995,324	736.3	10.3x	9.7x	4.4x	4.2x	30.8x	39.8x	15.5x	14.2x				
Healthstream	USD	30,285,335	694.7	2.8x	2.7x	2.6x	2.5x	15.1x	15.5x	13.8x	12.6x				
R1 RCM	USD	418,958,515	6,185.1	4.9x	4.2x	3.4x	2.9x	n/a	27.7x	35.3x	19.5x				
Apollo Medical Holdings	USD	44,547,688	1,485.5	2.2x	1.9x	1.3x	1.1x	15.0x	12.8x	12.2x	12.6x				
GPI	EUR	28,810,524	426.1	1.6x	1.3x	1.2x	1.1x	10.8x	8.9x	8.0x	7.1x				
Median				2.8x	2.7x	2.6x	2.5x	15.1x	15.5x	13.8x	12.6x				
Other															
GoodRx	USD	406,131,956	2,447.9	4.4x	3.3x	3.2x	3.3x	n/a	n/a	n/a	11.6x				
Terveystalo	EUR	126,556,301	1,518.5	1.5x	1.3x	1.2x	1.2x	9.6x	7.5x	9.0x	9.0x				
RaySearch	SEK	34,282,773	3,542.2	5.5x	5.5x	4.2x	3.6x	17.1x	18.0x	10.4x	9.3x				
Omda	NOK	20,691,910	1,175.2	5.1x	3.6x	3.2x	2.9x	20.2x	28.1x	n/a	16.1x				
Median				4.8x	3.4x	3.2x	3.1x	17.1x	18.0x	9.7x	10.4x				

EHR/ Care Pathways



ERP Finance & HR



Other



Sources: Capital IQ, Annual Report

Notes: 1) Median; 2) EBITDA and sales multiple have been subject to changes due to anomalies in specific reporting periods of peer group companies

CTA: The median for EBITDA multiples of precedent transactions is at 17.1x – it includes recent PE buyouts as well as strategic acquisitions in the last 8 years

Date	Target	Enterprise value ²⁾	Buyer	Target description	EV/EBITDA Median 17.1	EV/Sales Median 2.7	EV/EBIT Median 25.0
Sep 23'	nextgen healthcare	1,800,000,000	THOMABRAVO	US-based e-health company providing focusing on AIS, RCM, and EHR solutions	31.4x	2.6x	37.6x
Jun 22'	Gpi	561,287,800	cdp	Italian health and social assistance sectors solutions designer and provider	16.7x	1.7x	23.9x
Feb 22'	athenahealth	4,386,400,000	BainCapital	US-based company engaged with providing EHR and RCM, software and services	25.0x	n/a	n/a
Dec 21'	Cerner	29,200,000,000	ORACLE	Listed US-based developer and provider of healthcare information systems	17.7x	4.5x	25.6x
Jun 21'	sentry data systems	328,569,100	Craneware	US health-tech SaaS solutions provider	17.4x	4.4x	n/a
May 21'	EDL	100,000,000	ABENEX CAPITAL	French medical image software management provider	14.3x	6.7x	n/a
Nov 20'	eMDs	202,309,700	CGM CompuGroup Medical	US ambulatory EMR ¹⁾ and practice management software solutions provider	16.9x	2.5x	n/a
Sep 20'	software & computer systems SCS computers	4,240,000	MAPS GROUP SHARING KNOWLEDGE	Italian e-health software provider	7.9x	2.7x	n/a
Feb 20'	wellbeing software a Citadel Group Company	123,617,100	citadel group TECHNOLOGY + EDUCATION	British hospital software and services provider	16.1x	6.3x	n/a
Feb 20'	Cerner	225,000,000	CGM CompuGroup Medical	German healthcare document archiving solutions provider	19.4x	3.4x	n/a
Dec 19'	EVRY	2,300,000,000	tieto	Norwegian provider of healthcare, industrial and banking IT infrastructure provider	15.1x	1.5x	18.3
Jul 19'	PressGaney	3,533,600,000	LGP LEONARD GREEN & PARTNERS	US based vendor of satisfaction measurement services for health care facilities	17.4x	n/a	n/a
Dec 18'	dictate.it	25,000,000	Clanwilliam IRL	British healthcare software solutions provider	10.4x	2.3x	25.0
May 15'	MedAssets	1,710,500,000	PAMPLONA CAPITAL MANAGEMENT	US-based healthcare performance improvement company focussing on RCM	17.3x	n/a	n/a

Sources: Mergermarket

Notes: 1) Electronic medical records 2) in EUR; Most relevant transactions

08.5

Due Diligence
Exit



A strategic exit seems to be the most appealing option, as CGM’s international competitors are expanding through inorganic growth and the industry is in a phase of consolidation – additionally, large private equity investors show a strong track record in healthcare software

Strategic sale

			
Country	Germany	USA	Germany
Financials (in m)	Mkt Cap: EUR 181.43 Revenue: EUR 33.06 EBITDA: EUR 2.23 EBITDA Mg: 6.74%	Mkt Cap: USD 319.61 Revenue: USD 50.96 EBITDA: USD 14.05 EBITDA Mg: 27.6%	Mkt Cap: EUR 64.69 Revenue: EUR 21.7 EBITDA: EUR 4.3 EBITDA Mg: 19.8%
Description	SAP, a powerhouse in software development, specializes in a broad range of corporate applications, including enterprise resource planning and customer relationship management	Oracle Health Sciences, a player in the technological healthcare sector, offers comprehensive data management solutions tailored for healthcare research. Expanding its domain expertise and market reach, Oracle has recently acquired Cerner	Siemens Healthineers is a medical technology company operating in the healthcare industry. It provides digital health services and enterprise services facilities
Rationale	Growth into new segments via M&A	Grow in DACH and rest of Europe	Full package to offer for clients in the healthcare industry

Secondary buyout

			
Country	United Kingdom	USA	USA
Deals	Acquisition and sale of healthcare software company Allocate (2022)	Acquisition of Alegeus (2018)	Acquisition of Althea (2014)
Description	Hg Capital is focused on technology investments, primarily in Europe and the US, with an AUM of \$55bn	Vista Equity Partners has \$103bn AUM and invests mainly in technology businesses	Permira has \$77bn AUM and has a strong track record in healthcare software
Rationale	Private equity funds with a track record in acquiring IT healthcare software companies with succesful exits combined with experience in growth cases		

Sources: Company website, Annual Report, Yahoo Finance

Risk assessment: Factors and strategies to address potential risks stemming from recent substantial internal investments and a market marked by customer stickiness, inorganic growth, regulatory influence, as well as data privacy concerns have been analyzed and developed

Assessment of internal and external risk factors			Mitigation factors/strategies	
		Chance of occurrence	Financial damage	
INTERNAL	1 Margin re-boost CGM is yet to demonstrate its ability to fully capitalize on its previous investment phase and recover from its c. 5% margin drop			- Focus on turning recent extensive internal investments into top- as well as bottom-line growth through efficient integration of new subsidiaries and personnel - Monitoring and rebalancing of personnel expenses²⁾ as the major cost driver
	2 Inorganic growth The importance of M&A-driven growth ⁴⁾ strains cash conversion and margins and bears overpayment as well as PMI¹⁾ risk			- Diligent financial planning as well as in-depth, externally supervised due diligences MD Hannes Reichl (>10 years of PMI experience) showcased CGM's seamless PMI capability by acquiring INSIGHT and immediately launching a joint product
	3 New customer acquisition High switching costs create sticky customers, hindering market share growth through acquiring new customers with existing products			- Leverage CGM's experience in product portfolio expansion as well as new market entries to expand potential customer reach - Improving product portfolio and sales staff skills regarding cross- and upselling
	4 International cross-selling Due to regional regulatory differences , not all solutions can be universally cross-sold in every country			- Continuous research and monitoring of applicable legislation on regional and international levels to ensure swift adaption to changes and minimize downtime - Leverage the knowledge of regionally expertised personnel
	5 Data privacy and regulatory financial strains The financial and operational impacts of cyberattacks⁵⁾ , coupled with data protection breach penalties , threaten CGM's cash conversion			- Securing of appropriate cyber-security software and insurance to minimize the potential for financial damage Staff sensibilization and training to avoid and minimize incidents
EXT.	6 Governmental funding and regulatory tightening Diminishing state funding in the face of recession and evolving regulatory demands threaten product saleability and profitability			- Part of funding initiatives already processed and mainly influencing HIS business³⁾ - Continuous monitoring of regulatory changes and extensive R&D to secure first-mover advantage for updated products

Sources: Company information, BNP Paribas

Notes: 1) Post-merger integration, 2) c. 56% of expenses in 2022, 3) c. 25% of total revenues in 2022, 4) >50% share since 2015, 5) Shown in cyberattack in 2021

Low
 Medium
 High



Commercial and financial due diligence will be part of a pre-transaction phase – special pain points include high capital expenditures, decreasing EBITDA margins and increasing personnel expenses

Financial		Commercial					
Area	Financial reporting	Finance department	Customers	Competition	M&A targets	Market growth and trends	
Key analysis	- Analyze all parts of financial statements with special focus on cash flow statement - Analyze CAPEX, net working capital and cash conversion cycle - Assess future capital requirements and assets conditions	- Analyze how financial statements are prepared and if governance mechanisms are installed - Assess the chief financial officer’s department for correct processes - Make an assessment if the finance department is able to support the fund in its growth aspirations	- Analyse customers and define customer types (hospitals, private persons, public organizations) - Investigate the seniority of customers and how recurring they are - Understand expectations of customers and future trends	- In-depth analysis of competitors, also in new markets such as the US - Analyze product portfolio and services that CGM is not offering - Compare financial ratios, strategies and operational excellence	- In-depth analysis of all future targets especially regarding financial ratios, corporate governance, culture, growth drivers and margins - Assess the impact of the acquisition on CGM - Comprehensive insight into the markets of the target	- Explain extent to which market growth is influenced by macroeconomic conditions - Investigate and predict future trends in the healthcare market - Describe the market growth in the countries where CGM is active	
Key Red Flags	- Misstatements in the P&L or cash flow statements - Overvaluation of intangible assets or investments with future need to write-off - Financial fraud - Inability to pay off creditors	- Abuse of power from CFO in preparation of financial statements - Few employees that oversee the complete process - Majority of employees is expected to leave company within the upcoming 2-3 years	- Dependency on large customers, that if cancel their contract will have a huge impact on CGM - Customer characteristics, especially how sensitive they are to prices - Churn rate development	- Comparative operational disadvantage and lack of market outperformance - Competitors show better financial ratios - There is a constant threat of being taken over by larger competitors	- Narrow profit margins and challenges with cultural integration - Failure to complete the acquisition due to external obstacles	- Trends emerging in the future that not yet recognized by management and are associated with high costs - Excessive expectations regarding the expansion of the market (DACH and worldwide)	
Risk Level		Risk Level		Risk Level		Risk Level	

Sources: DePamphilis (2010), Patel (2023)



Operational, legal, and security due diligence will be conducted to ensure their adequacy and to confirm that they won't impact a successful completion of the acquisition – red flag items include the unexplained capitalization of in-house services

Operational		Legal		IT Security			
Area	Research & development	Capital expenditures and in-house service	Data protection	Legal disputes	External threats	Internal software stability	
Key analysis	- Understand the structure of R&D departments across subsidiaries and business units and if additional staff is required to maintain and drive CGM's technology leadership - Deep dive into the development of a product from R&D to testing to rollout	- CAPEX have been historically high and constitute a significant cash outflow for CGM - Understand the main drivers behind these expenditures apart from M&A and benchmark - Understand the nature of capitalized in-house services in this context and their relation to R&D	- Assess the need and governance on data protection laws within all countries CGM is active in - Assess with customers how much data protection they need to trust CGM's products	- Attain a level of confidence in the likelihood of future legal disputes - Establish favorable contractual arrangements - Review current contracts with customers, suppliers and all stakeholders to see if there is a threat to be sued	- Analysis of past external cyber attacks and if, how much data has been scraped - Assess current status of IT department and how many experts are employed	- Examine the historical data on system outages, bugs, and other incidents - Look for frequency, duration, impact, and the response times to resolve these issues - Assess the robustness of the infrastructure, including data centers, network architecture, and security protocols	
	Key Red Flags	- Understaffing of R&D department or high seniority within employees - High cost per new product and/or long time to market - Not attracting the right/best talent	- Unusually high CAPEX compared to peers - Increasing debt to finance CAPEX but not showing proportional top- or bottom-line growth - CAPEX that does not take into account upco-ming regulatory requirements	- Large leaks of customer data in the past - Unofficial, not reported incidents that may entail legal disputes or payments - Internal data regulation is not ensured	- Illegal clauses or conditions in contracts - Concealment of past disputes or future payments due to convictions	- High frequency of successful hacker attacks - IT department without state-of-the art protection software - High seniority of IT department employees	- Regular interruptions in service indicate poor infrastructure or inadequate resources dedicated to maintaining uptime - If CGM is not open about their infrastructure, security measures, incident reports
Risk Level		Risk Level		Risk Level		Risk Level	

Sources: DePamphilis (2010), Patel (2023)

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