3 Economic Report

3.1 Macroeconomic and Industry-Specific Conditions

General Economic Conditions

Global Economy

In 2024, the global economy continued to be impacted by geopolitical crises and persistently high interest rates in key economic areas. Nevertheless, global growth remained robust overall, with gross domestic product (GDP) continuing to grow at 3.0% in the first half of the year, according to the DIW Weekly Report No. 36-2024, and remaining stable in the second half of the year, ending the year at 3.2% according to the International Monetary Fund's World Economic Outlook published on January 17, 2025.

The economic development in the developed economies varied. While weak growth of around 0.8% is projected for the European Union (EU), the US economy performed significantly better, with an estimated growth rate of 2.8% according to the World Economic Outlook published on January 17, 2025. While the EU continued to suffer from structural weaknesses, restrained investment activity and the consequences of high energy prices, the US economy benefited from a robust labor market and solid consumer demand. This divergence underscored the different challenges and growth impulses in the two regions.

Declining inflation rates prompted the European Central Bank (ECB) and the US Federal Reserve (FED) to make their first interest rate cuts, from June and September respectively. Nevertheless, the interest rates in both economic regions remained relatively high, which – coupled with ongoing inflation – had a dampening effect on the investment and consumer behavior of companies and private households alike.

According to the IWF report as of January 17, 2025 GDP growth of approx. 4.2% is expected for emerging and developing countries. China, as a significant actor within this Group, experienced sluggish domestic demand, however, which had an adverse effect on emerging and developing countries as a whole.

In its Annual Report 2024/2025, published on November 13, 2024, the German Council of Economic Experts forecast global GDP growth of 2.6%, which represents an increase of 0.4 percentage points on the prior-year forecast. The International Monetary Fund (IMF) forecast global growth of roughly 3.2% for 2024 in its World Economic Outlook published on January 17, 2025.

Below, the performance of the regions relevant to the Nemetschek Group is examined in more detail.

Eurozone

Geopolitical crises, particularly the ongoing Russian war of aggression against Ukraine, once again dominated the economic performance of the Eurozone in 2024. In addition, the associated energy crisis continued to have an impact in 2024, although the situation on the energy markets eased compared to the previous year. Inflation fell compared with 2023, but remained high, which depressed the purchasing power of private households. On account of the partial normalization of inflation, the European Central Bank (ECB) was able to cut interest rates slightly for the first time in several years. However, interest rates remained comparatively high, continuing to contribute to low demand for credit and low investment growth. In particular, the German economy, as the largest Eurozone economy, continued its negative trajectory in 2024 following a price-adjusted decline in gross domestic product (GDP) of −0.3% in 2023. The main reasons for this development were the lack of necessary structural reforms, as well as the aforementioned high energy prices and interest rates and the slowing down of domestic consumption and international export demand. For Germany, the German Council of Economic Experts projected a moderate contraction of −0.1% for 2024, while the IMF's January 2025 update pointed to a slightly sharper slowdown of −0.2%.

Overall, in its Annual Report 2024/2025 published on November 13, 2024, the German Council of Economic Experts assumed economic growth of 0.7% for the Eurozone for 2024. In its World Economic Outlook published on January 17, 2025, the IMF currently expects growth of 0.8% in 2024, i.e., slightly in excess of its 2023 forecast of 0.4% for the Eurozone. According to Eurostat, the unemployment rate in the euro area remained stable at 6.3% in December 2024, with regional differences remaining high. The shortage of skilled workers is worsening in many sectors, including the software industry and the construction industry, and is hindering long-term growth prospects.

USA

The US economy performed well in 2024, bolstered by strong domestic demand and continued high investment in key areas such as semiconductor production and new technologies. Moreover, the Inflation Reduction Act (IRA) ensured further positive growth momentum, especially in renewable energies. The high interest rate burden had initial effects, however, as surplus private savings were largely used up and consumption slowed down in some cases.

Overall, in its Annual Report 2024/2025, the German Council of Economic Experts assumed economic growth of 2.7% for 2024, whereas the IMF arrived at a figure of 2.8%. According to the German Council of Economic Experts, the risks of a stronger slowdown have increased, but nonetheless remain limited.

Asia
Within Asia, Japan is currently the Nemetschek Group's strongest regional single market in terms of revenues. In 2024, Japan's economic performance was marked by a quite moderate growth rate, a slowing down of inflation, and structural adjustments. The IMF puts Japan's real-term GDP growth at roughly −0.2% for 2024. This represents a slowing down compared with the previous years, which is attributable to weaker global demand and the impact of production downtime, especially in the automotive industry. According to the World Economic Outlook published on October 22, 2024, inflation dropped to approx. 2.2%, compared with 3.3% in 2023. This was partially mad possible by lower commodities prices and the stabilization of the yen. Despite rising wages private consumption was weak as real purchasing power remained limited due to inflation.

Emerging Markets
The emerging markets are growing in importance for the Nemetschek Group. It is already active in individual countries and regions, such as India. In addition, the development of the Chinese economy is important for the Nemetschek Group. Due to its size, changes in the Chinese economy and economic policy have a direct impact on the development of neighboring countries and the entire global economy.

In its annual report 2024/25 published on November 13, 2024, the German Council of Economic Experts expects the emerging markets to grow by 4.3% overall. In its World Economic Outlook in January, the IMF predicts growth of 4.2% for 2024. Developments in the individual countries in the emerging markets group will continue to vary strongly. For the **Asian region**, the IMF predicts growth of 5.2% for 2024. The slight decline compared to 2023 (5.7%) is mainly due to the slower recovery in China, where structural problems in the real estate sector and muted export demand are hampering momentum. With a growth rate of 6.8%, **India** remains the region's growth engine and is the world's fastest-growing economy, according to Germany Trade & Invest (GTAI). Key factors driving this development include subsidies such as production-linked incentives (PLI), which provide targeted investment support, as well as rising domestic demand and increasing purchasing power. In addition, ongoing digitalization, together with extensive infrastructure projects, is creating an innovation-friendly environment that encourages companies to make additional investments. The demographic structure – a young population with great labor force potential – as well as a series of government reforms and efforts to reduce bureaucracy are further strengthening the confidence of foreign investors and consolidating India's position as a growth engine in the region.

According to the World Economic Outlook of October 22, 2024, the IMF expects the positive development in **European emerging markets** to continue in 2024, with a growth of 3.2% after 3.3% in year 2023. The IMF sees a stable development in the European emerging countries, with a growth of 3.2% in 2024 on the back of 3.3% in 2023. According to the IMF, the **Latin American emerging markets** are set to grow by 2.4% in 2024. The region remains affected by low commodities prices and the uncertainties in Brazil and Argentina. A return to more stable political conditions, however, could boost investment activity. A growth of approx. 2.4% is expected by the IWF for the **Middle East and Central Asia**, which is up slightly on 2023 (2.0%). A more stable geopolitical environment and diversification strategies away from the oil industry are having a positive effect. After **Saudi Arabia** experienced a slight decline in economic growth of −0.8% in 2023, the economy recovered and is expected to achieve a growth rate of 1.3%, according to the Saudi Arabian General Authority for Statistics. This adjustment reflects the deliberate reductions in oil production, both as a result of the country's own measures and of OPEC agreements to stabilize the global oil market. While the growth rate in the oil sector slowed, the non-oil sector (tourism, technology, and entertainment) remained a driving force for the economy. With a forecasted growth rate of 3.8% (according to the IFW), the **African developing countries** are seeing a moderate improvement. Investments in infrastructure projects and a diversification of the economy are spearheading expansion, even though many countries continue to struggle with high debt levels and inflation.

Sources: DIW Wochenbericht No. 36-2024, German Council of Economic Experts, Annual Report 2024/2025 dated November 13, 2024, and International Monetary Fund, World Economic Outlook Update dated October 22, 2024, and January 17, 2025. January 2025, Eurostat (Statistics | Eurostat) und German Trade Invest (Wirtschaftsausblick Indien); Oxford Economics und General Authority for Statistics.

Development of industry-specific conditions in the construction industry

Europe
In 2024, Europe remained the most important market for the Nemetschek Group, accounting for around 49% of group revenue. Following growth declines in the construction industry in the previous two years, particularly due to high interest rates, this trend continued in 2024, with the industry contracting by −2.4%. This was due to weaker domestic and foreign investments, which led to a fall in demand for building materials and other associated preliminaries. Moreover, high interest rates and tense lending conditions had a substantial impact on the real estate market, which, in turn, weakened the construction sector, partly because of the diminishing effect of generous incentives for energy-efficient renovation. Private non-housing construction was also hindered by high borrowing costs and structural changes such as

the rise in hybrid remote-working models and online retail, which have cut demand for office and retail spaces. The individual European markets performed very disparately in some cases in 2024. While the highest declines were mainly recorded in the Nordic countries, such as Finland (–5.4%), Sweden (–5.3%) and Norway (–4.9%), countries such as Spain (+2.0%), Portugal (+1.5%) and Ireland (+1.4%) even achieved notable growth rates. The German market, which is important for the Nemetschek Group, recorded a slightly disproportionate decline in the construction industry of 2.8% compared to the rest of Europe.

North America

Alongside the European market, the **United States** is one of the most important sales markets for the Nemetschek Group. For 2024, the FMI (as of October 2024) anticipates that expenditure in the construction sector will continue to rise, albeit at a slower rate than in the prior-year period, meaning that growth of approx. 5% is to be anticipated. The three segments of commercial building construction (+6%), the infrastructure sector (+5%), and the housing market (+5%) all contribute to this development with similar growth rates. Within commercial building construction (+6%), the areas of public safety (29%) and production facilities (21%) represent the chief drivers of growth. In the housing market (+6%), the picture has reversed compared with the previous year. Whereas multi-family homes were still the growth driver in 2023 (+18% in the year 2023), they posted a –4% decline in 2024. By contrast, single-family homes (+5%) and housing renovations (+8%) gained renewed momentum following the declines witnessed in 2023.

On the back of minimal growth of just 2% for the construction industry in **Canada** in 2023, it recovered slightly in 2024, with growth of +4% forecast for 2024. This recovery was particularly pronounced in housing growth, which once again recorded a slight increase (+2%). However, the growth of +4% seen in commercial buildings was lower than the previous year's increase of +8%.

Asia/Pacific

The construction industries in the Asia–Pacific region which still represent the world's largest building sectors exhibited a decline of around 3.0% in 2024. This development was influenced by a variety of factors.

The construction industry in **China**, in particular, recorded a sharp decline of around –5.3%. Although public-sector investment in infrastructure, particularly in the transport sector, was bolstered by the 14th Five-Year Plan, demand in the real estate sector was held back by high excess debt. In addition, strict government controls, such as limits on the indebtedness of real estate companies, borrowing restrictions on buyers, land purchases, and construction regulations, had a negative impact on the market.

India's construction sector remained a growth region in 2024, with a rise of 7.5%. The driving factors were large-scale infrastructure projects, continued urbanization, and increasing investments in housing projects. The government also implemented initiatives such as the National Infrastructure Pipeline, channeling significant funds into road, railroad, and energy projects.

The **Japanese** construction industry recorded moderate growth of approx. 1.8%, driven by investments in the modernization of infrastructure and transport networks. Major projects, such as expansion of the Shinkansen high-speed rail network, contributed to this stability.

In 2024, the construction industry in **Saudi Arabia** recorded growth of 0.4%. The weak growth of the construction industry in Saudi Arabia in 2024 resulted mainly from production cuts in the oil sector, which led to lower government revenues and reduced infrastructure investments. According to the Construction Outlook Q4 2024 for Saudi Arabia, Oxford Economics is forecasting a return to higher growth of 3.0% to 6.6% in the coming years. Residential and commercial construction is seen as a driver of growth, while civil engineering is not expected to see significant growth until 2026. The main underlying growth drivers are investments in Vision 2030 projects, rising private investments and improved credit conditions.

Other countries such as Indonesia, Vietnam and Bangladesh recorded average growth of more than 5.0%, with urbanization and economic development remaining key growth drivers.

Sources: 98th EUROCONSTRUCT Summary Report, Winter 2024 (November 2024); 2024 North American Engineering and Construction Outlook, Fourth Quarter Edition (October 2024), Fortune Business Insights (Marktgröße für Baumaterialien | Globaler Branchenbericht 2032); Mordor Intelligence (Analyse der Marktgröße und des Anteils von Bau- und Konstruktionsplatten – Branchenforschungsbericht – Wachstumstrends); Construction Outlook, Q4 2024 Saudi Arabia (December 2024); Oxford Economics.

Development of the Media and Entertainment Industry

The global 3D animation market continued to be influenced by the geopolitical crises and conflicts in 2024. In addition, ongoing challenges such as the film and TV strike in Hollywood prevented the market from fully unleashing its growth potential. In spite of these limitations, the media and entertainment market grew overall, driven by technological innovations and rising demand for high-quality visual and creative content.

A key factor for the sector's resilience is the diversity of markets and target groups addressed, particularly by innovative solutions such as the Maxon Group brand. Maxon solutions are not only used to produce feature films, TV products, and commercials, but also in the games industry and the fields of medical illustration, virtual reality (VR), augmented reality (AR), architecture, and industrial design.

In the long term, the brand benefits from powerful structural growth drivers, such as the growing use of VR and AR technologies and the integration of artificial Intelligence (AI). Forecasts indicate that the global 3D animation market will achieve a low double-digit annual growth rate by 2030, which is attributable to increasing demand for animated experiences and the application of visual effects in various sectors.

Source: PwC Global Entertainment & Media Outlook 2024-28 (https://www.pwc.com/gx/en/news-room/press-releases/2024/pwc-global-entertainment-and-media-outlook-2024-28.html)

3.2 Business Performance in 2024 and Key Events Influencing the Company's Business Performance

General Statement on the Economic Position of the Group

2024 was marked by geopolitical conflicts and crises and the macroeconomic challenges resulting from these factors. The consequences of the ongoing Russian war of aggression on Ukraine and the escalating Middle East conflict, which is spreading within the region, influenced world events and impacted the global underlying economic conditions. Overall, however, the global economy once again proved to be resilient in 2024. Global declines in inflation, and the associated cuts in interest rates by individual central banks, also had a supporting effect and, overall, ensured a slight improvement in the global economy. This overall development, however, was marked by considerable regional and industry-specific uncertainties. In this challenging environment, the Nemetschek Group once again performed positively and generated very strong business results.

In the course of 2024, the Nemetschek Group's business developed very favorably and better than originally expected in the outlook for the financial year 2024 published in March. In particular, the operational strength of the business and the resilience of the business model, which is also based on the continued successful transition of the business model to recurring revenues from subscription and SaaS models, have once again shown how the Nemetschek Group can develop very successfully even in a demanding and challenging environment. With the acquisition of GoCanvas Holdings, Inc., (Reston, Virginia, USA) on July 1, 2024, the largest company acquisition in the history of the company to date was successfully completed during the financial year, see *<< M&A / Start-up und Venture Investments >>*.

Despite the ongoing transition of the business model to subscription and SaaS models and a still challenging market environment, overall Group revenue increased by 16.9% (currency-adjusted: 17.2%) to EUR 995.6 million. Organic growth, i.e., adjusted for the effects from the takeover of GoCanvas Holdings, Inc., with effect from July 1, 2024, came in at 13.7% (currency-adjusted: 14.0%).

The Group's earnings before interest, taxes, depreciation and amortization (EBITDA) grew to EUR 301.0 million (previous year: EUR 257.7 million). At 30.2%, the EBITDA margin was almost at the previous year's level of 30.3%. This includes one-time costs for M&A activities as well as the dilutive effect of the profitability of GoCanvas Holdings, Inc., which is still below the Group average.

The organic EBITDA margin, i.e., excluding the dilutive effect of the lower operating profitability of GoCanvas, was at 31.1%. The results do not yet reflect the full potential of GoCanvas Holdings, Inc., as both the revenue and EBITDA contribution in the second half of the year were reduced by a high single-digit million euro amount due to the IFRS-related purchase price allocation.

Annual recurring revenue (ARR) grew by 41.9% (currency-adjusted: 41.6%) to EUR 1,019.9 million. Organic ARR growth, i.e., adjusted for the GoCanvas contribution, of 34.6% (currency-adjusted: 34.2%) was generated. The ARR growth was therefore significantly more than the Group's revenue growth, which indicates a growth potential in the next 12 months.

In line with the strategy, the share of annual recurring revenue in total revenue increased significantly to 86.5% (organic, i.e., excluding GoCanvas Holdings, Inc.: 86.3%). As such, this figure climbed by around 10 percentage points compared to the prior-year figure (76.6%).

The ongoing Russian war of aggression on Ukraine as well as the ongoing military conflicts in the Middle East have left traces on the company and its employees. The Nemetschek Group believes that the economic sanctions imposed on Russia are an important instrument for restoring peace in Ukraine and therefore continues to suspend all activities with sanctioned persons, organizations or regions until further notice. In 2021, i.e., before the outbreak of war, business in Russia accounted for roughly 0.5% of total Group revenue. At present, no revenues generated in Russia are known.

The military conflicts in the Middle East continued in 2024 and spread within the region. As the Nemetschek Group does not have any direct business relations in the war region and does not engage in any activities there, the immediate consequences of the war on its earnings, financial and asset situation remained insignificant in 2024.