Strategy – Heidelberg goes digital!

Profitable growth through systematic implementation of digital agenda

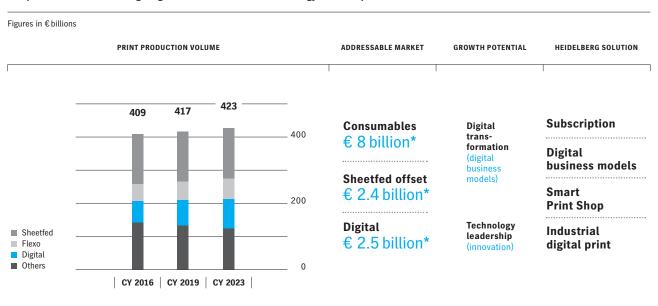
As previously, our strategic focus is concentrated on the transformation of the Company that was initiated in the financial year 2017/2018 in line with the clearly defined digital agenda that we are implementing with the slogan "Heidelberg goes digital!". The Group strategy is based on Heidelberg's established market and technology leadership as an end-to-end system provider of printing presses, consumables, software and services. The Company's aspiration is to be perceived as a pioneer in the digitization of the printing press industry. We aim to achieve even greater customer loyalty and to increasingly expand value added for the customer across the entire lifecycle.

The Company's future operating success will be built on our global installed printing press base, its digital connection and networking, and the data it delivers. This will enable us to increase our customers' efficiency, profitability and success. We have started offering usage-dependent contract models that will allow us to grow in line with our customers' output.

Value-added potential defined in all core areas

Although it is often underestimated in the face of the growth in digital media, print business is a huge area that will continue to enjoy steady growth in the coming years. The total print volume is expected to increase from around \in 417 billion in 2019 to \in 423 billion in 2023, with digital printing in particular enjoying above-average growth. Heidelberg has defined growth potential for all of its core areas – sheetfed offset equipment, digital printing, software, service and consumables – as well as suitable measures for leveraging this potential and creating value for our customers and all of the Company's stakeholders.

In the area of sheetfed offset printing, some 90 percent of the available market volume of around $\in 2.4$ billion is realized by five providers in Germany and Japan. Heidelberg is the undisputed market leader with a share of over



Our potentials: Growth through digital transformation and technology leadership

* Accessible market for Heidelberger Druckmaschinen, excluding postpress

40 percent. Heidelberg has a market share of around 5 percent when it comes to consumables such as imaging plates, inks and coatings, which account for an annual market volume of around \in 8 billion. It intends to significantly increase this share through organic and external growth, for example by offering new digital business models as a holistic solution across the lifecycle of a printing press and by expanding its e-commerce platform.

The trend towards increasingly customized printed products with increasingly small print runs is strengthening the position of digital printing within the industry. To date, Heidelberg's share of the total market volume of around $\in 2.5$ billion is less than 5 percent. It intends to successively increase this share by offering new and innovative digital printing presses, particularly in the areas of packaging and labels.

To allow it to efficiently leverage the resulting market potential with suitable products and services, Heidelberg has defined the implementation of the digital transformation and the expansion of its technology leadership as its two strategic growth drivers. These core strategic topics are supplemented by the implementation of numerous measures to improve the Company's operational excellence, and hence its profitability.

Digital transformation – participating in customers' output with the new subscription model

The concentration on increasingly large, industrialized print shops will continue in future. As this involves the use of larger, more powerful and more productive printing presses with higher utilization, the value-added structure of the industry will shift towards a higher share of service, software and consumables as a result. In order to increase customers' productivity, the huge data volume generated by the software used and the countless sensors installed in the presses must be harnessed intelligently. Big data is the central element of Heidelberg's future success. With more than 13,000 Heidelberg printing presses and around 28,000 Heidelberg Prinect modules for data transfer installed to date, the Group can already call up this data at any time of the day or night. To this end, Heidelberg has developed and established the Smart Print Shop – the intelligent networking and automation of all components and processes, with the user only having to intervene in the autonomous process chain as required.

Heidelberg is also the only provider in the industry that can offer its customers a full range of printing presses, services, consumables, consulting and software in an all-in contract. The optimal, data-driven interaction of all coordinated individual components enables a significant improvement in overall system effectiveness and utilization for the customer. This gives customers not only stateof-the-art technology, but first and foremost a solution with which they can increase their competitiveness.

In order to reap these rewards along with the customer, Heidelberg introduced its subscription model in late 2017. Under a subscription contract, the customer no longer pays for the individual components, but rather for use over the lifecycle as well as the number of sheets printed on a performance-related basis. The new business model guarantees constant, plannable revenue streams over a long period irrespective of the volatility of new machinery business and is directly linked to the growing print production volume with a higher share of wallet, i.e. more value created per order. Over a typical five-year contract, the potential project sales can be increased by up to 70 percent compared to a one-time transaction. Improved purchasing benefits and rising economies of scale can therefore also lead to higher margins. As announced, Heidelberg concluded the first subscription contracts by the end of the financial year 2018/2019: around 30 in total, almost half of which were with new customers of the Company. Using the initial insights and experience from an entirely new business model of this nature, it now intends to work intensively to create the necessary conditions and infrastructure for the efficient scaling of the business model and to significantly expand the number of contract customers. The first presses under contract are already productive and will generate further continuous sales in the financial year 2019/2020.

The automated e-shop that was launched in 2018 is intended to enable all Heidelberg customers to benefit from the aforementioned intelligent use of data. This digital platform allows printing presses to be automatically provided with the necessary consumables, thereby significantly reducing complexity for the customer. To this end, Heidelberg has launched the Heidelberg Digital Unit, a new center of excellence for digital marketing and e-commerce, which will increase e-commerce sales almost threefold over the next few years, among other things.

The market potential for digitization in our industry is considerable. We still expect the implementation of our digital transformation measures and the new business models to generate a sales volume of at least \in 250 million in the medium to long term.

Expansion of technology leadership remains a key component of success

In the financial year 2019/2020, we will again channel around 5 percent of consolidated sales into research and development in order to expand our technology leadership. The Company's innovative strength has also been boosted by the innovation center for around 1,000 employees that opened at the Wiesloch-Walldorf site in December 2018. The numerous development projects are focused on the expansion of the industrial digital print portfolio and, in offset printing, the further development of the Smart Print Shop. Further information on our development activities can be found in the "Research and Development" chapter on pages 25 and 26 of this report.

The flagship product for digital printing is the packaging printing press "Primefire 106". Series production began in early 2018 and the first systems are already in operation in Germany, Switzerland, China and the US. Customer interest is high and the potential market will expand in the future as the press and its areas of application become more technologically advanced. As customization in the packaging market is continuing to gain in importance to a considerable extent, we believe the Primefire 106 offers significant sales potential. It can also play an important role in the future packaging market in connection with new business models like web-to-pack. The same is true for the new digital label printing press from Gallus ("Labelfire"). In this area, Heidelberg intends to benefit from the growth in the global print volume for self-adhesive labels. As the share of this market attributable to digital printing technology is still well below 10 percent, above-average growth rates are anticipated.

With regard to its entire product range, Heidelberg is increasingly benefiting from recently developed automation functions like Push-to-Stop and the aforementioned networking of printing presses, software, consumables and services within the Smart Print Shop. In light of the importance of data use, the expansion of the software range is one of the central pillars of Heidelberg's growth and digitization strategy. The Prinect production workflow, the established management information systems for central operations management and the Heidelberg Assistant are key factors in digital cooperation with customers.

The market potential for digital packaging printing and connected print production is particularly high. As previously, the expansion of Heidelberg's technology leadership is expected to generate a sales volume of around \in 200 million in the medium to long term.

Risks and Opportunities

Sales opportunities beyond core business thanks to high-tech applications

The Group has already demonstrated at various level of application that its technologies can be used for business areas and products beyond its core business. One of the flagships is the Heidelberg Wallbox, which has already successfully established itself on the market for electric vehicle charging systems, with around 1,500 units shipped to the customer in the past financial year. The new innovation center will therefore continue to work on innovative products for digital platforms and IT solutions for design, production and services in the area of high-tech applications for industrial customers. This includes focusing on products for control and power electronics as well as the production of high-precision 3D printing platforms and innovative software solutions for digital business models.

We expect the expansion of the high-tech product range to generate sales potential of around \in 50 million in the medium to long term.

Operational excellence with a focus on cost efficiency and improved productivity

Heidelberg's future success will depend not only on generating additional sales sources and sales potential, but also on improving its profitability. It intends to achieve this by increasingly focusing on profitable, high-margin activities in its core business areas as well as leveraging efficiency and cost reduction potential by improving operational excellence throughout the Group. Improvements to logistics, site and space optimization and the standardization of printing press platforms have already been realized and will be continued. The corporate culture, and hence the management culture, are also transitioning to a more streamlined, efficient and agile organization and being further modified to reflect our market segments of packaging, commercial and label with a focus on the customer. With regard to our global administrative, production and manufacturing structure - including in light of demographic development at our German production sites in particular - we are working on a future concept that will promote innovation while ensuring cost optimization. All in all, the efficiency improvement measures are expected to improve the operating result by around € 50 million in the medium term.