helbling



Highlights 2021

At a glance



Sustainability at Helbling

With its broad service portfolio, the Helbling Group can make a substantial contribution to the sustainable development of the economy, environment, and society.

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New energy supply for Empa Dübendorf

Helbling planned and coordinated the reorientation of the energy supply to meet contemporary requirements in terms of flexibility and ecology.

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Sustainable milk foaming machine: Lattiz 2.0



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SBB: Feasibility study of decarbonizing



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Client representation at Eichwisstrasse residential complex



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loT data logger for rockfall nets



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Successful transaction for ifesca



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PSI: Digitization of development processes



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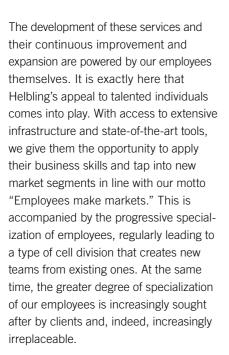
The company portrait appears in German and English. The German version is always authoritative.

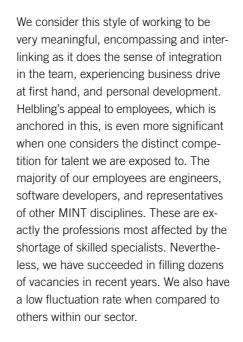
Visit our website to find out more about us and our services.

Employee development and corporate growth Two sides of the same coin

Dear Readers.

The success of the Helbling Group essentially rests on its ability to recruit talented specialists in a broad range of disciplines, promoting their further development, and maintaining it in the long term. But what does an approach of this nature – one that is based closely on the principle of sustainability – mean for the employees, our most valuable resource? The answer to this question cuts straight to the heart of what distinguishes Helbling. As a service provider, we not only supply our clients with the know-how and experience of our employees. The added value we create, our unique selling proposition, is to be found more in our ability to create interdisciplinary teams that offer clients unique combinations of skills to solve complex tasks.





The sustainable development of employees that focuses on encouraging talented individuals in work that is regarded as meaningful is part of a comprehensive appreciation of sustainability at Helbling. What this consists of and how it shapes every aspect of our business activities are the main focus of this company portrait and business report.

On behalf of the Helbling Group partners,

Dr. Christian Péclat





Marcel Fäh

Key figures

589 Full-time equivalents Revenue (in CHF million)

increase from 563 to 589. The average employment consisted of 4 apprentices and 28 interns and working students.

135.9

2021 saw the Helbling Group achieve a new record result. Revenue increased by 10.4 percent compared to the previous year.

40% Foreign revenue

around 40 percent. The second-largest market after Switzerland was Germany in this respect, with a revenue share of 19 percent. Helbling was looking after clients from a total of 22 countries in 2021.

470 **Customers**

Most of these are companies from practically every sector in the manufacturing industry. Others include customers from the service and public sectors.

15.5 Cash flow (in CHF million)

still be financed from the company's own funds.

million emails

phishing, spam, or malware by our security systems After all, each Helbling employee receives around 60 emails a day. The statistics do not tell us how many of these are actually useful.

1963 Founding year

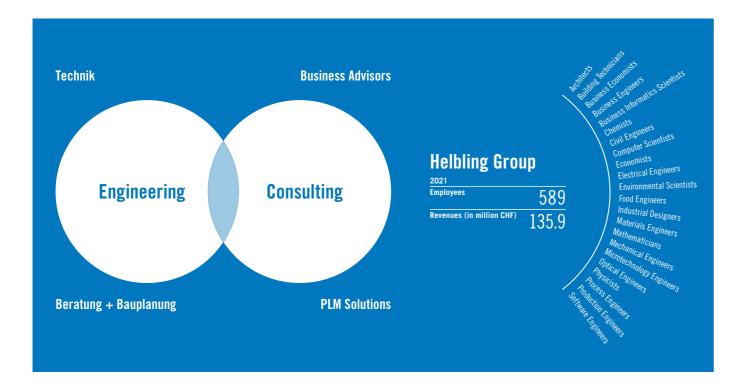
Helbling has gained a wealth of experience from thousands of projects over almost six decades. This, combined with cutting-edge research and technologies, provides the basis on which Helbling's engineers

The Helbling Group currently has 34 managing partners and around 280 employees who also participate in the company through participation certificates. This tried-and-tested participation model ensures an organic succession arrangement ca. 60 % **Equity ratio**

The Helbling Group's solid financing is among the central prerequisites for its sustainable development. Thanks to its high equity ratio without interest-bearing debt, Helbling also has a top rating among banks for privately owned SMEs.

Helbling GroupValuable through Innovation

The Helbling Group has its headquarters and several subsidiaries in Switzerland, is represented through companies in Germany, USA and China and has worldwide project experience.



About us

The Helbling Group was founded in 1963 and is owned by its 34 managing partners. The internationally active engineering and consulting firm employs some 570 professionals in four business divisions focused on innovation / product development, management consulting, mergers & acquisitions, restructuring, information technology, real estate, energy and infrastructure.

Our industry expertise

- High-tech industry semiconductors/electronics, microtechnology, automation/robotics, medical technology, machinery/apparatus
- Automotive industry/supplier
- Transport/traffic/aerospace
- Processing industry, pharmaceuticals, biotechnology, chemical industry, food industry
- Trading Financial services
- IT/telecommunications
- Energy industry
- Infrastructure/public sector

New in our Guiding Principles

Innovation to shape a future worth living for

Our company's culture strives to bring out the best in its people and the environment we operate in. Through our federalist system, we aim to provide a space that gives our people the freedom and assistance they need to innovate.

These are the forces that move us forward toward a shared future of sustainability and achievement we can all be proud of having played a part in creating.

Creating these opportunities for sustainable growth can and will be done with our customers to open up doors to opportunity not yet considered but waiting to be taken.

Second record year in succession Extensive exports from Switzerland

Once again, the Helbling Group achieved a record result in the 2021 financial year. Revenue was CHF 135.9 million, representing growth of 10.4 percent when compared to the previous year. The growth in revenue even exceeded 12 percent in local currencies. The share of revenue generated abroad grew further in 2021, representing around 40 percent of the whole. As in previous years, the second most important market after Switzerland was Germany, with a major part of the revenue generated there the result of the export performance of the Helbling locations in Switzerland.

The level of full-time equivalents increased from 563 to 589 in the reporting year. Helbling employed a total of 625 personnel at the end of 2021, representing an average employment level of about 90 percent. The fluctuation rate increased slightly in 2021 from 8.5 to 9.2 percent, but this was still below the long-term average of 10 percent. Together with growth in the workforce, this led to the recruitment of around 81 new staff during the year.

Focus on the manufacturing industry

The majority of our clients are from the manufacturing industry which, overall, can look back at a good year, thanks to the recovery of the global economy. Whether in the development of machines, consumer goods or, in particular, medical devices in the field of diagnostics, Helbling profited from steady demand on the markets in this investment-friendly environment.

Procurement problems due to the pandemic and increased costs for raw materials and components resulted in Helbling being commissioned by different clients to redesign their products or adapt their sourcing and supply chain strategy. Our Operational Excellence service was also in high demand, and a new Digital Process Transformation team was formed under its umbrella. Naturally enough, this led to close cooperation with our Product Lifecycle Management (PLM) team, the core of digitization in the manufacturing industry.

The proportion of projects in which more than one Helbling division was involved generally increased in the most varied of combinations between individual locations, national subsidiaries, and the different companies in the Group.

Challenges due to COVID-19

COVID-19 measures that changed several times also demanded a high degree of adaptability in the second year of the pandemic. These measures affected travel, the ability to meet clients, and the staging of events in equal measure. However, the greatest challenge of all once again proved to be the rule governing phased working from home. Despite how routine virtual communication has now become, it cannot adequately replace a real personal exchange. This is indispensable for developing and cultivating trustworthy relationships within a team, particularly when it occurs informally. The induction of new employees while working from home proved particularly difficult. Regular and real interaction with new employees is necessary if the corporate culture is to be internalized and new staff are to profit from the knowledge of their experienced colleagues.

Outlook

The Helbling Group started the current year very well, with healthy levels of orders in practically every division. Against this backdrop and, indeed, on the basis of their own market assessment, all four divisions anticipate growth in 2022.

From this year, the priorities of our strategy will include an even greater focus on all aspects of sustainability, from the development of innovative solutions and the manner in which we provide our services to the cultivation of long-term partnerships and the personal development of our employees.

Sustainability at Helbling — Success through meaningful work for a worthwhile future

It is difficult to find a company today that is not committed to sustainability. The main emphasis in this respect is primarily on reducing a company's own ecological footprint. As an engineering and consulting company, the Helbling Group is well positioned to achieve considerably more in this respect. With its broad service portfolio, it can make a substantial contribution to the sustainable development of the environment, economy, and society. The company has launched its own sustainability initiative to exploit this potential in the future through a more systematic and consistent approach.

The modern concept of sustainability is based on the recognition that human well-being, economic performance, and the conservation of natural resources are mutually dependent. None of these three goals can be achieved without the others. The three-pillar model for sustainable development was created against this backdrop and, in addition to ecological sustainability, also encompasses sustainability in an economic and social context. The United Nations has defined 17 Sustainable Development Goals (SDGs) on the basis of this model. They are at the heart of Agenda 2030, which came into force in 2016.

The SDGs are aimed at states and civil society to the same degree as the scientific community and businesses. The latter are encouraged to analyze the 17 goals to determine which of them they can most effectively support. It is precisely this task that the Helbling Group has embraced, identifying a series of goals where it can contribute to their achievement.

Six sustainability building blocks

The Helbling Group has defined six building blocks for the operationalization of the Sustainable Development Goals selected. Specific sustainability goals and initiatives of the Group are based on these building blocks. These are defined annually by the divisions and their business centers in the context of the strategic planning and budgeting process. The sustainability focus in this respect should at all times be where the potential impact is the greatest. When it comes to the determination and achievement of ambitious sustainability goals, making sustainability a core component of Helbling's corporate indentity and anchoring it firmly in daily business is indispensable. For this reason, the Helbling Group has made sustainability a core value of its mission statement.

Points of departure for sustainable solutions

The greatest leverage the Helbling Group possesses to encourage active participation in creating a sustainable future is in its customer projects. Relevant approaches range from the development of sustainable strategies and business processes (Helbling Business Advisors, PLM Solutions) and of eco-intelligent products and systems (Helbling Technik) to sustainable infrastructure designs and systems and buildings optimized for energy efficiency (Helbling Beratung + Bauplanung). Helbling also positions itself as a service provider for customers operating in the sustainability eco-system (e.g., renewable energies, energy storage, sustainable foods), developing promising solutions in collaboration with these customers.

One area of particular focus for Helbling is the systemic examination of the entire product life cycle – from fair procurement and manufacturing that conserves resources and the optimized use of energy and resources in the long term to the reuse or recycling of used components and materials. This assumes that these considerations are already incorporated into the early phase of a project. It is necessary to demonstrate to customers in a plausible manner that, in addition to benefiting the environment and society, sustainable solutions also strengthen their own competitiveness in the long term.

Broader definition of innovation

Helbling differentiates itself on the market through an understanding of innovation that has been expanded by a further dimension, with sustainability being added to meeting requirements, technical feasibility, and profitability. Innovations understood in this sense range from the optimizing of existing solutions to disruptive change.

The Helbling Group embraces the development of sustainability-oriented services through the targeted expansion of its technical and methodological expertise and its skills in the areas of technology and standards. The necessary education and training opportunities for employees are developed accordingly. Investments are also made in infrastructure (e.g. laboratories and tools). Furthermore, Helbling's close integration into a sustainable eco-system in which development and research partners are as much a part as universities and industry organizations is immensely important.

Long-term partnerships

At the heart of the different collaboration associations in which the Helbling Group is involved are, naturally enough, its customers. Helbling strives to cultivate long-term partnerships with these. Relationships of

this nature, anchored in trust, are a necessary prerequisite if two goals are to be achieved simultaneously, namely the development of new solutions for a worthwhile future and the strengthening of our own competitiveness on the market.

As far as Helbling is concerned, the concept of sustainability also contributes to the long-term support and development of employees. Helbling offers them meaningful work which, in addition to involvement in sustainable solutions, also offers them a chance for entrepreneurial development and the continuous broadening and deepening of their skills and expertise. The framework for this is provided in a federal organization with flat hierarchies and a corporate culture that focuses on the quality of interpersonal relationships.

Sustainability at Helbling is based on six building blocks to which the relevant UN Sustainable Development Goals can be assigned.



Empa — Redesign of Empa/Eawag site energy supply in Dübendorf

Helbling supported the project from the initial idea, project planning, and approval process to its realization and handover to the customer following successful commissioning.





Empa, the Swiss Federal Laboratories for Materials Science and Technology, which shares the same site as Eawag, the Swiss Federal Institute of Aquatic Science and Technology in Dübendorf, was created in the 1960s on a greenfield site after the premises at ETH in the center of Zurich became too confined. Having evolved historically, the site adapted over the years to changing needs. This required a fundamental redesign to meet contemporary requirements in terms of flexibility and ecology.

A goal was therefore defined to reduce around 60% of CO₂ emissions when compared to the reference year of 1990, including through a change in procurement (hydroelectricity, biogas). In addition to security of supply, the flexibility of the research facility needed to be assured. Working in close cooperation with the client, Helbling developed a system to achieve these goals which, in addition to low CO₂ energy production, facilitates the exchange of waste heat within the site and enables seasonal displacement of waste heat from the warm to cold months through a large borehole heat exchanger. Future uses can also be supplied in this manner.

The core element of the system is the mean temperature grid, consisting of two large tubes (DN250) that form a ring over the entire site. The respective consumers, heat generation plants, and the recooling facility are connected to this. An existing reservoir with a volume of 215 m³ acts as a hydraulic separator and connects the different systems. The lines are laid as a so-called "pressureless system." This means that there is no defined direction of flow, and decentralized processes are responsible for conveying the water.

In addition to a heat pump with an output of 500 kW that brings water from the planned borehole heat exchanger to the temperature level of the mean temperature grid (38/28 °C) and can raise it further to the temperature level of the high temperature grid (65/40 °C), a cogeneration unit (combined heat and power) was planned. This has a power output of 480 kW, supplies the mean and high temperature grid and, in particular, is available to a research department for trials.

The heating plant building was also upgraded and refurbished. Additionally, several hundred meters of

pipe were laid in trenches, during which remediation of contaminated land became a core issue.

Commissioning of all systems took around two years. It proved possible to maintain operation at all times during this, as this was a central concern of the client. The cost estimate from Helbling was adhered to across all operations. The systems are operating as planned, while the optimization cycle will commence in the coming months, and Helbling will continue to support the client during this.

Results/Achievements

Conversion of the energy supply during ongoing operation was successfully completed, and the supply of processes in both research institutes was at no time impaired.



Andre Wagner, Dipl. Ing. FH, MBA, Senior Vice President, Helbling Beratur + Bauplanung, Zurich, Switzerland

"Helbling planned and coordinated reorientation of the energy supply with us over many years, particularly distinguishing itself through continuity and its unifying interaction with different stakeholder groups at the site."

Tomasz Bialik, Project Manager, Empa Dübendorf

An interdisciplinary project team from Helbling covered a broad variety of technical areas during the entire project dura-tion. Excellent cooperation with Project Manager Tomasz Bialik, technical services at Empa, and other companies involved ensured that the project was realized to the satisfaction of all stakeholders.

FrieslandCampina's Lattiz 2.0 — Milk foaming machine for Hotels, Restaurants and Catering (HORECA)

A more sustainable way to your Cappuccino and Latte Macchiato. Milk foam is very popular, especially in combination with coffee. Looking at the ratio of milk to coffee in a Latte Macchiato one wonders why it is called Coffee Shop and not Milk Shop.



Rainer Maisch, lic. oec. publ., Head of Business Unit Beverages Technologies & Tools, Helbling Technik, Bern, Switzerland

"It was for the project team and for me very rewarding to participate in such meaningful project driven by technology, quality and sustainability."

Experienced professionals from FrieslandCampina and Helbling Berne and Munich teamed up for this development consisting of project and requirement managers, milk foaming process and quality experts, marketing stakeholders, physicists, mechanical engineers, hardware and software engineers as well as representatives from the machine manufacturer, suppliers and third-party APP and cloud software developers.



Overview

Fresh milk requires resources including heating to make it durable, refrigeration to keep it fresh as well as packaging to protect it. Cleaning of the dispensing machine requires additional energy and chemicals. With Lattiz 2.0 FrieslandCampina invented a revolutionary sustainable solution reducing packaging/transportation, refrigeration, food waste and daily cleaning.

Our Contribution

FrieslandCampina has mandated Helbling to develop Lattiz 2.0 dispensers which mix the 3 to 1 concentrated milk with heated water and compressed air. Special attention had to be given to reliable operation, longevity, robustness and reparability of the machine. This development included:

Development of the mechanics of the complete machine (i.e., housings, fixations, interfaces), the fluidic system (including i.e. heating algorithm for heating water without energy loss), of the pneumatic system, electronics hardware and software (including the definition of an optimized energy-improved heating algorithm, machine operation, user interface and connection to internet and cloud).

Results/Achievements

Product LCA shows a 19–23% reduction of CO_2 equivalent compared to traditional milk foaming machines. On site service averages only once in every 5 years resulting in less kilometers travelled, less material used for spare parts and happy customers!

BHP Brugger und Partner AG — Corporate Social Responsibility Assessments in the Cloud

Helbling Technik provides efficient, tailor-made software solutions to support companies that wish to expand and optimize their services. Helbling Technik created an online platform for BHP – Brugger und Partner AG – that streamlines companies' sustainability analyses.



Overview

In close cooperation with the client, Helbling Technik designed and implemented a cloud solution for creating corporate social responsibility (CSR) assessments in the context of four investment funds. Using complex algorithms, data on social and ecological impacts, for example, is input and amalgamated in clear and comprehensible assessment reports.

Our Contribution

In a variety of workshops, a cooperative effort produced a comprehensive solution that covers the needs of different users and provides the best possible support for the complex assessment creation process. This step considerably simplified the work of analysts and quality managers. The multi-client-capable and role-based system was implemented on Amazon AWS using a variety of open-source libraries. An intuitive user interface reduces the training requirement for users to a minimum. In addition, the flexible software architecture facilitates future expansion and the integration of peripheral systems.



Berthold Andris, Software Ing. FH, Head of Development Team Medical & Consumer Software, Helbling Technik, Aarau. Switzerland

"Sustainability as a goal, complexity as a challenge, and close cooperation with the client as a guarantee of success."

Climate change, social impact, diversity, and environmental impact are core challenges for modern companies. These and other issues are at the heart of CSR assessments and provide the client with a basis for dialog with portfolio firms. They also affect each and every one of us, inspiring the project team and motivating it to peak performance.

Results/Achievements

Significant project success factors include the elimination of media discontinuities and the creation of an option for the efficient realization of assessments.

SBB – Feasibility Study on Decarbonizing of Thermal Rail Vehicles

The replacement of thermal drives in existing vehicles in the medium term is a requirement of the SBB's climate goals. In view of the ecological and economic issues involved, SBB turned to Helbling Technik for the appropriate selection of new drive technologies.



Pascal Beyerle, Dipl.-Ing. Fahrzeugtechnik (FH), Senior Vice President, Helbling Technik, Aarau, Switzerland

"Projects which aim to reduce CO₂ emissions are sustainable for people and motivational for the project team."

A competent project team with extensive experience in the field of decarbonization of fossil vehicle drive systems ensured the success of this future-oriented, exciting and multifaceted project within the shortest possible time. This was due to factors such as the technical expertise and ability of the project team to involve a multitude of stakeholders through target-oriented communication and then structure and process all information so clearly. In addition to valuable technical and commercial results, the outcomes included a high level of customer satisfaction.



Overview

Helbling Technik was commissioned by SBB to devise a feasibility study on the installation of various alternative drives (battery-electric or hydrogen) in a track maintenance vehicle that currently runs on fossil fuel. Technical and economic framework conditions were taken into consideration in this respect.

Our Contribution

A rough layout was created for the new drivetrain on the basis of a load profile analysis. This involved an investigation of whether the available installation space could enable the realization of a battery-electric or hydrogen drive. Technical feasibility was analyzed and an economic assessment conducted by means of a cost estimate for the engineering, conversion, and operation of a prototype. Significant risks regarding development and implementation were depicted together with a provisional approval concept. A "combustion engine with hydrogen" variant was also examined.

Results/Achievements

The project facilitated a demonstration of the feasibility of several drive types (battery and hydrogen variants). Infrastructural challenges and approval steps were successfully depicted.

Geobrugg GUARD — IoT Data Logger for Rockfall Nets

A glance at the dashboard replaces time-consuming and at times dangerous terrain inspections. The Geobrugg GUARD is a smart device that is secured to the cable of a flexible rockfall net barrier. It can transmit the measurement data of its sensors for decades via a mobile link to the cloud.



Overview

The Geobrugg GUARD is waterproof, has a battery life of between seven and ten years, and is equipped with a range of sensors for measuring environmental and physical data. It transmits measurement data – encrypted several times – to the cloud via mobile telephony. Helbling Technik developed and industrialized the entire system.

Our Contribution

The Geobrugg GUARD IoT data logger was developed in several project phases from the original concept to series production. Extensive field tests were conducted at an early stage with the first functional models. The data collected contributed to the optimization of the device use-case function during development. Cost optimization and industrialization of the product were carried out at the same time. In addition to technical aspects, Helbling Technik also addressed industrial design, the optimization of the workflow during installation of the data logger in the field, and rapid commissioning in the cloud.



Dr. Johannes Eckstein, Head of Development Team Optics & Sensor Systems, Helbling Technik, Wil. Switzerland

"Development of the IoT data logger provided Geobrugg with the cornerstone for a new digital business case."

This product development saw the Helbling team make an elementary contribution on the journey to digitization at Geobrugg. The Helbling Technik project team was progressively adapted to face the challenges in the project. As a result, Geobrugg received the best possible support at all times – in all phases of basic development and support of field tests to industrialization of the product.

Results/Achievements

Helbling Technik handled the complete development of the device for Geobrugg, including industrialization, and an initial series was successfully developed. An expanded field test is currently being conducted, involving over 200 devices distributed all over the world.

Güdel Group — Definition and Successive Implementation of Future Global Footprint

The Güdel Group enjoys an extremely good reputation internationally in the area of automated solutions. Vision 2025 was developed at the end of 2019, heralding the introduction of a reorientation process. This was supported to a significant degree by Helbling Business Advisors through cooperation in a spirit of partnership.



Robin Drost, Dipl. Ing. ETH, MBA HSG, Senior Vice President, Helbling Business Advisors, Zurich, Switzerland

"This project sees us making a valuable contribution to the successful supply of sustainable automation solutions for customers of the Güdel Group."

The project with the Güdel Group saw Helbling Business Advisors deploying four consultants with differing degrees of intensity. The appropriate skills profile was provided in each phase of the project. During the analysis and design phases in particular, work was conducted in extremely close cooperation with the CEO, Prof. Hans Gut, corporate management, and the Güdel team. Step by step, implementation of the initiatives is gradually transferred to the line management.



Overview

Originating in the overall "Vision 2025" strategy, future application fields were defined and the required skills and production capacities including their appropriate allocation within the Güdel Group were outlined. The global footprint was successively substantiated with a greater degree of centralization and streamlined processes.

Our Contribution

- Development of the Vision 2025, including strategic initiatives and respective business cases
- Elaboration of a competence matrix covering about 20 locations as a basis for shaping the future global footprint (headquarters, production locations, sales and service points)
- Organizational adaptations, including honing of roles and responsibilities
- Evaluation of value creation in production regarding competitiveness and strategic relevance
- Analysis, design, and selective implementation support in selected strategic initiatives (e.g., product range, delivery performance, insourcing and outsourcing of assemblies)

Results/Achievements

Project achievements include structural streamlining of the organization and focus on promising business fields, stronger centralization of the global footprint to provide economies of scale, and a focus on core competencies with strategic outsourcing and insourcing of assemblies.

ifesca — Successful Support of the Largest Financing Round to Date

ifesca is an IoT enterprise that provides an AI-based intelligent forecasting system for the fully automated provision of real-time forecasts for industry and the energy sector. Helbling Business Advisors supported ifesca during the entire transaction in the context of a financing round.



Overview

The software supplied by ifesca enables the exact forecasting of electricity consumption and electricity generation with the aid of cognitive AI. State-of-the-art energy storage solutions are involved in this process. Power is purchased and storage systems are filled when the electricity price is most favorable. This peak power shaving achieves savings of 20 percent and, through continuous use of the software, savings of up to 90 percent are even possible when compared to manual forecasts.

Our Contribution

Experts from Helbling Business Advisors acted as exclusive consultants, providing ifesca with comprehensive assistance during the entire transaction. This included the precise identification and contacting of potential investors, the creation of marketing documents (IM), and support during negotiations until closing. The intralogistics KION Group was acquired in this fashion as a strategic partner. Its involvement means it has become the second-largest owner of the still young enterprise. Helbling Business Advisors will also support ifesca during the next financing round (which has already been planned).



Andre Wassmann, MBA, Dipl.-Betriebswird Senior Vice President, Helbling Business Advisors, Dusseldorf, Germany

"We were impressed by the stringent process management and the negotiations. As a result, Helbling Business Advisors contributed enormously to the successful conclusion of the transaction."

Cornelia Böse

(Senior Investment Manager at bm|t beteiligungsmanagement thüringen)

Helbling Business Advisors' disciplined and structured approach in M&A projects, negotiating skills and structural expertise made a valuable contribution to the success of the transaction.

Results/Achievements

Capital gained during this financing round will be used for company growth, the expansion of sales activities abroad in Europe and internationally, and the development of newly acquired markets.

BVK — New residential complex on Eichwisstrasse in Hombrechtikon

Helbling Beratung + Bauplanung assisted BVK with an overall performance study contract. As the client representative, Helbling was involved during project definition and the evaluation of the general contractor. Helbling will continue to support the builder during the subsequent realization phase.



Gian-Reto Peer, Dipl. Architekt FH, Senior Vice President, Helbling Beratung + Bauplanung, Zurich, Switzerland

"Closely cooperating with the builder to evaluate a reliable and competent partner was extremely pleasurable and a resounding success."

Experience gained in a variety of study contracts involving different usages allowed the team from Helbling Beratung + Bauplanung to provide BVK with professional support during the evaluation process. Over the next two and a half years, Helbling will continue to support the builder during the planning and realization phase in the role of client representative.



Overview

The client wants to retain the plot on the edge of the village in its portfolio as a sustainable residential property. A general contractor to plan and realize the complete project was evaluated by means of an overall performance study contract. The five new buildings contain a total of 56 apartments and are of a wooden construction. The property is certified pursuant to the Swiss Sustainable Building Standard (SNBS).

Our Contribution

Overall performance study contract:

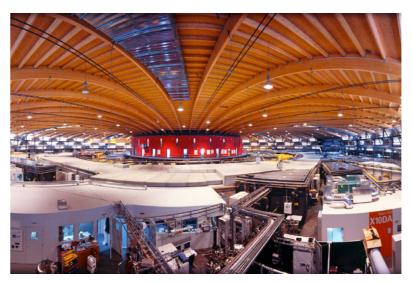
- Coordination and procurement of required specialists
- Drafting of a study contract program, including appendices
- Clarifications with the authorities; coordination of pre-qualification; preparation of the study contract, preliminary checks, assessments, and decision-making bases for the client
- Coordination and moderation of different jury sessions
 Client representation:
- Representation and advising of the client in all construction questions
- Monitoring of construction and coordination of construction acceptance
- Participation in client meetings
- Development of project management tools
- Monitoring of costs, deadlines, and quality control

Results/Achievements

The overall performance study contract enabled evaluation of a reliable partner that guarantees the quality, costs, and sustainability. The wooden construction and SNBS certification mean that a future-oriented property will be created, with a particular focus on sustainability.

PSI – Digitization of Development Processes

Together with Helbling PLM Solutions, the Paul Scherrer Institute (PSI) successfully introduced the Dassault Systèmes **3D**EXPERIENCE® digital development platform for the development of the new SLS 2.0. As of the end of 2022, all major research installations will be developed on **3D**EXPERIENCE®.



Overview

The Paul Scherrer Institute (PSI) is the largest research institute for natural and engineering sciences in Switzerland. New standards will be created with the SLS 2.0 project to ensure sustainable and long-term success as a research location. The PSI leverages the **3D**EXPERIENCE® platform for the first time to develop the research facility.

Our Contribution

Helbling PLM Solutions has been advising and supporting the PSI for about 20 years with regard to PLM and CATIA applications. The existing VPM V4 and CATIA V5 systems will be replaced by the new **3D**EXPERIENCE® platform. In cooperation with the client, Helbling PLM Solutions analyzed the current state and elaborated scenarios for future development. Detailed processes and the data migration concept were defined in in-depth workshops before new working methods were developed and deployed in company-specific trainings. The pilot project already saw the successful migration last year of SLS 2.0 development to the new platform.

Results/Achievements

The introduction of **3D**EXPERIENCE® was both on time and on budget. All development will transfer to **3D**EXPERIENCE® at the end of the year, and around 300 users will work with the platform.



Thomas Mächler, BSc FHO in Mechanica Engineering, Senior Consultant, Helbling PLM Solutions, Zurich, Switzerland

"It is a pleasure to be involved in the introduction of 3DEXPERIENCE® at the PSI and, as a consequence, to strengthen Switzerland as a research location."

The mixed project team consisting of project managers and specialists at the PSI and Helbling PLM Solutions managed to establish a solid collaboration based on close partnership and trust. Existing processes were scrutinized and improved with major support from management and through the openness and candor of the project team. This enabled implementation of a sustainable digital solution that offers further scalability for the future.









We are an independent partner for innovation and R&D services, supporting our clients in close cooperation to achieve a competitive advantage and added business value. The support ranges from ideation to verification of the technology throughout to marketable products.

Sectors & services

- Home, office & catering appliances
- Production machinery& automation systems
- Industrial equipment & tools
- Medical technology
- Diagnostic & laboratory systems

 Machatronics & repotics
- Mechatronics & robotics
- Optic systems& microtechnologies
- Software engineering& information technologies
- Scientific informatics (data analytics, artificial intelligence)
- Modeling, calculation& simulation
- Transport & mobility
- Energy & intelligent infrastructure
- Plant planning & production optimization
- Ideation
- Embedded software& electronics
- Industrial design & usability

Tasks

- Brainstorming
- Advance development (technology & feasibility studies)
- Technology development (finding solutions, modeling & simulation, optimization proof of concept)
- Product development

 (concept, proof of efficacy
 proof of safety,
 serviceability, design,
 prototypes)
- Experimental examination, testing & proof of perfor-
- Design transfer (industrialization, manufacturing documents, support of procurement, installation & commissioning, deployment)
- Design verification

 Draiget % risk management
- Project & risk management

The demand for innovation continues unabated around the world and has been strengthen by the Covid-19 crisis, mainly in the field of digitization. Technological progress, internationalization and interconnection of markets, regulatory obligations, cost pressure and expectations with regard to sustainability are placing ever more demands on successful products. We are well prepared to meet this challenge with our business model and a wealth of experience in building and maintaining successful partnerships, including at a geographic distance. At seven locations in Switzerland, Germany, the USA, and China, 42 specialized, business-driven development teams work together in a service partnership with a professional design and laboratory infrastructure. Even during the Covid-19 crisis, we realized interdisciplinary projects without interruption, from the initial idea right through to series production. We support the Hebling Group's sustainability initiative by means of the systematic development of our business division and our service offering.

We are deeply motivated by the idea of successful products, satisfied clients, and employees who enjoy their work. In this regard, we attach equal importance to innovative strength, implementation competence, reliability, and discretion. We carefully combine our proven development and project management methods in a careful, measured fashion with agile approaches to meet increasing demands for flexibility. Simultaneously, we ensure high performance and adherence to deadlines and costs.







Helbling Business Advisors — Your partner to shape a sustainable future of your enterprise

We advise companies on successful future-proofing in matters concerning strategic, operative, and financial challenges. On the basis of our comprehensive consulting expertise, we develop solutions that improve competitiveness on a sustainable level and lead to greater profitability and growth.

Strategy, Market & Sales

- Growth strategy & business model
- Sales strategy & offensive
- Market & customer insight

Value Chain & Technology

- Supply chain, production, and logistics
- Global production footprint
- Procurement & purchasing
- Innovation & product management

Digital Process Transformation

- Digital target operating model
- Digitization of business processes
- SAP S/4 HANA transformation

Turnaround Management

- Independent Business Review (IBR)
- Turnaround concepts (IDW S6)
- Operative implementation and support of measures
- Debt advisory
- Option analysis, forecasting in insolvency law

Mergers & Acquisitions I Corporate Finance

- Acquisition & sale of companies (incl. distressed M&A)
- Financial advisory & fund raising
- Transaction services (incl. valuation & due diligence)
- Post-merger integration

Strategy I Value Chain & Technology I Digital Process Transformation

Through the redesigning of company strategies and organizational structures, we help our clients achieve differentiated competitive positions and generate profitable growth.

We develop effectiveness- and efficiency-enhancing programs along the entire value chain and in the technology area, and technology area, achieving cost and process optimization and enhancing productivity as a result.

With regard to digital transformation, we support our clients during the design and development of the digital target operating model. In particular, we implement digital end-to-end processes from product innovation to successful realization of the order. Our specific focus here is on supporting SAP S/4 HANA transformations.

Turnaround Management and M&A | Corporate Finance

We develop concepts and measures to achieve the financial recovery and strategic reorientation of our customers. We energetically support these companies during resolute implementation

Our M&A experts boast a combination of experience, industry expertise, and creativity, enabling them to achieve optimum transactions. As part of the Corporate Finance International group, we are also anchored in a global network that allows us to conclude transactions on a transnational level.









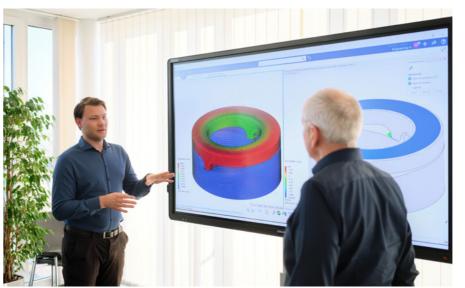
We lead complex real estate, industrial, and infrastructure projects to success. Energy-related services round off our portfolio. Our almost 50 employees stand for interdisciplinarity, objectivity, and the creation of client benefits.

Services

- Energy concepts for clients from the real estate & industry sectors
- Building services engineering, general planning, BIM coordination for real estate & industrial clients
- Development of new services for manufacturing companies in the food & consumer goods industry
- Project definition, master plan/feasibility study, market and location analysis, architectural competition and study contract, evaluation and transaction for real estate & industrial clients
- Project management for construction project owners, representation of construction project owners, user and operator representation for clients from the real estate, industrial & infrastructure sectors
- Client consulting and support, BIM consulting, studies, compiling expert reports and guidelines in an executive capacity for real estate & infrastructure clients
- Status analysis/technical due diligence for real estate & industrial clients

Our world is the project business in the sphere of buildings and facilities under public and private ownership across a vast range of sectors. With our experience and expertise, we are able to transform complex tasks into sustainable solutions in a high-quality, specific, and competent manner for all of the stakeholders involved. The broad experience background of our employees builds the basis for our services, which we provide in close collaboration with the decision-makers – both in advising and representing clients and in comprehensive planning and consulting in the field of energy and building services engineering. We also provide our clients with competent support in the development of sites and locations.

Helbling Beratung + Bauplanung acts as an independent company. This ensures that our clients enjoy objectivity, an unrestricted focus on their needs and thus freedom of action. We provide our services to our clients in a spirit of partnership. This enables us to focus fully on their respective buildings and plant facilities, and to then achieve convincing results with signature characteristics.







Helbling PLM Solutions — Your partner for the digital innovations process

IT solutions for innovation and interdepartmental collaboration within companies: We offer our clients consulting competence, implementation expertise, and integration services, drawing on the broad and in-depth knowledge of our employees.

PLM Consulting

- Project management
- Coaching
- Expert reports, audits & analyses
- Organizational consulting
- Process optimization
- Methods/solution concepts
- IT architecture/infrastructure

PLM Solutions

Product-based concept development and implementation:

- 3DEXPERIENCE® platform (on Premise/on Cloud)
- CATIA
- ENOVIA
- SIMULIA
- DELMIA

PLM Service

- Training seminars
- Support (on-site & via hotline)
- Company-specific additional development work
- Support of local support teams

Product Lifecycle Management

We are a leading provider of product lifecycle management services and software solutions. Our main focus is on the digitization of processes throughout the entire product lifecycle. With our projects we implement the efficient and sustainable cooperation across different functions and locations, from product development to manufacturing and servicing. Over the past fiscal year, our specialists successfully designed, configured, and commissioned corresponding solutions for numerous well-known customers.

A large proportion of these projects was based on the pioneering **3D**EXPERIENCE® platform developed by our partner Dassault Systèmes – a system in whose implementation we played a leading role. Our clients include companies from the high-tech, aerospace, consumer goods, as well as from mechanical and plant engineering industry. With many of them we maintain long-term partnerships. The cooperation is characterized by personal care and close working relations. In addition to consulting, sales and solution adaptations, this includes continuous operations support.

Global Spectrum of Experience

Our Locations



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Helbling Group

Valuable through Innovation