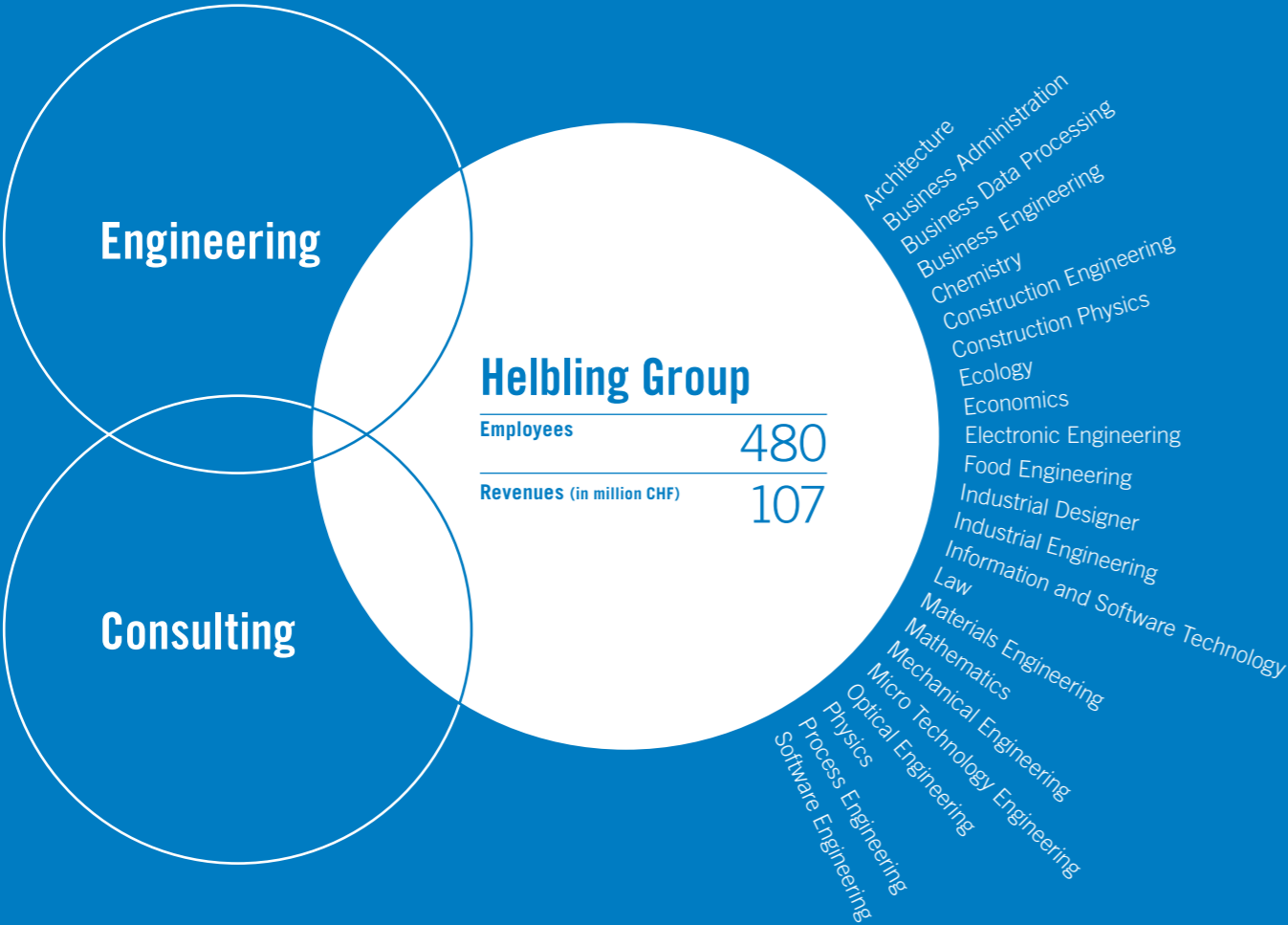




## Company Portrait and Business Year 2015

# We realize innovations efficiently and solve entrepreneurial tasks



Helbling Technik	Helbling Business Advisors	Helbling Beratung + Bauplanung	Helbling PLM Solutions
<b>Employees</b> 350	<b>Employees</b> 65	<b>Employees</b> 35	<b>Employees</b> 15
<b>Revenues (in million CHF)</b> 72.5	<b>Revenues (in million CHF)</b> 17.5	<b>Revenues (in million CHF)</b> 9.5	<b>Revenues (in million CHF)</b> 7.5
<b>Locations</b> Aarau, Bern, Boston, Munich, Shanghai, Wil SG, Zurich	<b>Locations</b> Düsseldorf, Munich, Stuttgart, Zurich	<b>Location</b> Zurich	<b>Location</b> Zurich

# Through Innovation to Differentiation

Dear Readers

The world is spinning ever faster – fortunately not in astronomical terms, but in the real everyday world of our economy and society. Mankind is on a constant quest for new ideas, new solutions and new business models. In a world of rapid technological progress, greater productivity and under pressure to save costs, innovation is no longer a choice but a necessity. By innovation we understand the creation of new products as well as the redesign and further development of business models, innovation, production processes and services. The strength of the Swiss franc over the past year heightened the relevance of this trend. Because the Helbling Group supports its clients in these areas, innovation and change are familiar themes to us. This challenges us to advance our services to ever new levels and to invest in the ongoing education of our professionals, thus preserving a solid fundament of state-of-the-art expertise that delivers sustained benefits to our clients. The growing pace of change, the greater complexity and multiple dependencies of today's developments present our clients with the same challenges as those we face. It is becoming a core capability to concurrently manage change in diverse areas such as digital transformation, technological evolution, sustainability requirements, international market positioning, new production processes, competitiveness and the cultivation of an adaptable corporate culture.

A range of foreseeable changes in the business and technology environment, foremost among them digitalization, the Internet of Things, automation and robotization, as well as the Industry 4.0 revolution in general, chiefly offer opportunities for countries with extremely good education and research institutions, high wage costs and low capital costs like Switzerland and Germany. The greater availability of financial resources in these countries particularly facilitates investment in change and especially in innovation. Openness to change is here the key element. The corporate sector and prosperity for the population as a whole have always developed best where change is recognized as an opportunity and is translated rapidly into innovation.

With this in mind we grasp the challenges presented by conditions in the economic environment and the requirements of the businesses we serve and look forward to accompanying our clients successfully on this journey. On behalf of the Board of Directors, the Executive Committee, our 31 partners and all our employees we would like to extend our sincere thanks for the trust you place in us for more than 50 years.

Sincerely yours



**Dr. Reto Müller**  
Chairman of the Board of Directors  
Helbling Group



**Dr. Christian Péclat**  
CEO  
Helbling Group

# Successful in Turbulent Times

2015 was a good year for the Helbling Group operating in a turbulent environment. Although the year was marked by great uncertainty, starting with the Swiss National Bank's abandonment of the minimum exchange rate versus the euro on 15 January, the Group even reported a slight increase in revenues of 1.1 % in local currencies. Consolidated in Swiss francs, group revenues came to CHF 107 million, 2.3 % down on the previous year. At 480, our headcount remained more or less stable at the previous year's level.

All divisions of the Helbling Group again managed and executed complex, interdisciplinary projects for our clients in 2015. The most important of these were innovation and development projects as well as strategic and operational consulting mandates for large corporations, mid-sized firms and start-ups. The strategic significance of innovation has increased substantially for companies, especially those in the manufacturing industry. Driven by growing cost pressures generated by the stronger Swiss franc and the high factor costs in Western Europe, businesses are compelled to defend their market position through innovation, enhanced efficiency and restructuring. Precisely that is the focus of our services.

## Multidisciplinary Suite of Services and Open Networks

We help companies strengthen their leading position in the world's markets, working closely with them as a sparring partner in defining strategy and as a creative laboratory for innovation. Moreover, we can also offer them a comprehensive multidisciplinary suite of consulting services – something that makes the Helbling Group's offering unique. The key approach we employ here involves open networks geared towards a specific goal that can generate a significantly greater dynamic than centralized, closed structures. This philosophy is

also reflected in the decentralized organization of the Helbling Group.

## Cross-Divisional Services and Specialized Project Teams

The tasks we are mandated with are complex and reflect the high standards that solutions in industry are currently required to meet. We tackle these challenges with a diversified range of services and technologies. In close collaboration with a well-known automotive supplier our specialist teams thus completed a feasibility study for a new production plant in Southern Europe. This plant will produce aluminium wheels for various European automobile manufacturers from mid-2017 onwards. The interdisciplinary, specialized project team that worked on the study consisted of mechanical and civil engineers, architects and economists. Helbling delivered substantial contributions in the fields of production and machinery technology, energy and media planning and in the functional design of buildings and factory site, enabling important interfaces between the client's process technology, the various machinery suppliers and the building and site planning by the total contractor.

We are proud of our mixed teams of diverse nationalities that make such a project from a single provider essentially possible.

## Building and Preserving Knowledge

Precisely because we continually expand our own knowledge of industries, technologies, processes, methodology and best practices, we can provide sustainable added value for our customers. As an engineering and consulting firm it is in our DNA to expand our knowledge on a constant basis. Knowledge really evolves through the efficient application of the expertise and experience of our specialists. This fosters a team dynamic in our project work that springs from many years of building knowledge and results in innovative and novel thinking and approaches.

It is inherent in our corporate strategy to be and remain an attractive employer for the people in our company. Whoever works for us knows that she or he can contribute to the company's success. The low staff turnover rate is therefore decisive for our success in our work with clients. For several years the staff turnover in the Group has been less than 10%, a very low figure in our industry.

## Sound Finances

The Helbling Group earns a third of its revenues outside Switzerland, principally from mandates at our locations in Germany, USA and China.

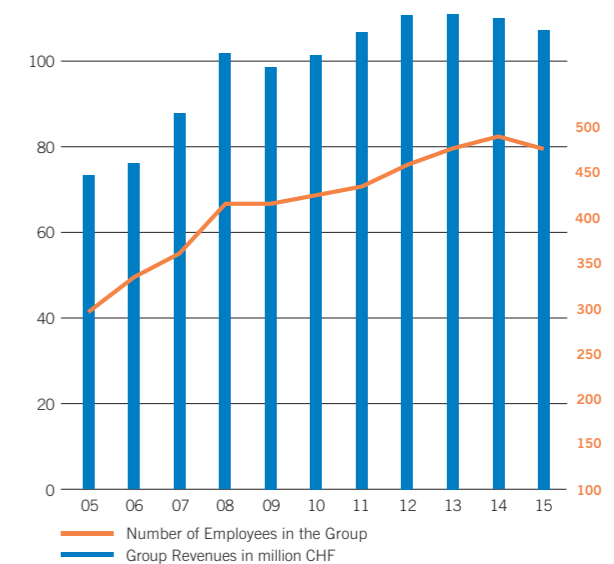
As in previous years, the Group's good earnings power with an operational cash flow of CHF 10.6 million again enabled us to finance all investments in the expansion of our locations and their infrastructure from our own funds in 2015. We were also able to maintain our high equity ratio of over 55%, which continued to secure us a top rating for privately-held mid-sized companies awarded by the banks.

## Stable Shareholders

In 2015, five experienced members of management became partners in our firm. Currently a total of 31 partners and over 200 holders of participation certificates are active in the Group.

The proven partnership model and sound corporate financial condition ensure stability and a smooth generational succession in the management of the Group, thereby enabling us to resolutely pursue our strategic goal of sustained corporate development allied with complete independence.

The Helbling Group is thus excellently positioned to tackle the future. The year 2016 has begun very well and we look forward – even in these challenging times – to providing our clients with a full range of professional support in the areas of strategic and operational business management.



**Reto Müller**, Partner  
Dr. oec. HSG  
Chairman of the Board of Directors  
Helbling Group



**Christian Péclat**, Partner  
Dr. sc. tech. EPFL  
CEO Helbling Group  
Member of the Board of Directors



**Walter Huber**, Partner  
dipl. Ing. FH  
Member of the Group  
Executive Committee



**Stefan Huber**, Partner  
lic. oec. HSG  
Member of the Group  
Executive Committee



**Marcel Fäh**, Partner  
lic. oec. publ.  
CFO Helbling Group  
Member of the Board of Directors



**Bruno Berther**, Partner  
Head of Controlling



**Philipp Stoffel**, Partner  
dipl. Ing. ETH, Dr. sc. tech.  
Member of the Group  
Executive Committee



# Spectrum of Experience in the Global Economy

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

## Our Focus

- A nexus of technological and business know-how
- Entrepreneurial innovation management from strategy to product development, marketing and resource planning
- Mid-sized companies/organizations and divisions of large corporations
- Industry know-how
- Implementation and achievement of results
- Independence (no conflicts of interest) thanks to sound finances and an enviable track record of business success

## Our Visions

### People generate markets

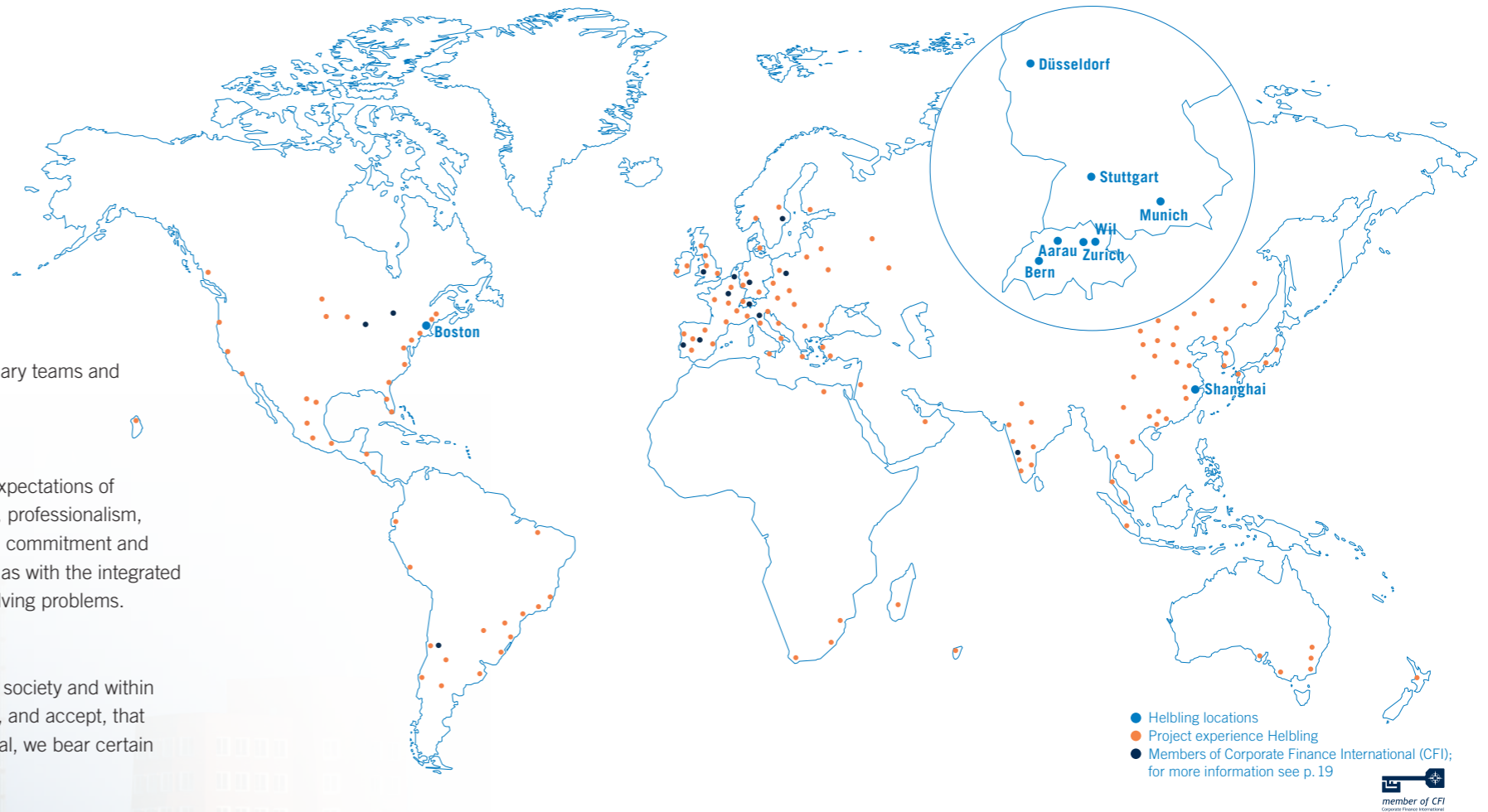
We create scope for interdisciplinary teams and creative entrepreneurship.

### Whatever we do, we do it right

We strive to exceed our clients' expectations of our market services with respect, professionalism, expertise, high quality standards, commitment and trustworthy co-operation, as well as with the integrated business approach we take to solving problems.

### We are part of our world

We recognize our integration in a society and within a complex environmental system, and accept, that as a company and as an individual, we bear certain responsibilities.



## Our clients include leading players in the following sectors:

- |                           |                              |                                    |                                 |
|---------------------------|------------------------------|------------------------------------|---------------------------------|
| - Apparatus               | - Energy                     | - Micro Technology                 | - Senior Residential Facilities |
| - Automation and Robotics | - Engineering                | - National and International Trade | - Software                      |
| - Automotive              | - Environmental Technologies | - Paper Production                 | - Space                         |
| - Automotive Supply       | - Financial Services         | - Pharma                           | - Telecommunications            |
| - Aviation                | - Food Industry              | - Plastics                         | - Textiles and Clothing         |
| - Banking and Insurance   | - Healthcare                 | - Precision Instruments            | - Tool and Mold Making          |
| - Biotechnology           | - Hospitals                  | - Printing                         | - Transportation and Logistics  |
| - Building Systems        | - Household Appliances       | - Public Companies                 | - Vehicle Construction          |
| - Care Homes              | - Industrial Electronics     | - Public Sector                    | - Watch Industry                |
| - Chemicals               | - Information Technology     | - Research and Education           | - Wholesale                     |
| - Construction            | - Instruments Manufacturing  | - Retail                           |                                 |
| - Consumer Electronics    | - Mechanical Engineering     | - Security Technology              |                                 |
| - Electrical Engineering  | - Medtech                    |                                    |                                 |



## Digitalization – and this is only the beginning ...

Digitalization is changing society so completely, and faster than most other developments before it. Industry 4.0, Big Data, the Internet of Things, connectivity and cloud computing – to name just a few innovation drivers – present immense opportunities, but also challenges because they have the potential to radically alter business models and production processes. The ability to capture and exploit these opportunities early on will have a major impact on a company's success.

What should future products look like? What influence will new technologies have on the business model? Are current production processes already obsolete? Thanks to the perfect interaction between engineering and business consulting, the Helbling Group is well positioned to help clients respond to these key questions and support them competently through the entire implementation process.



### Readiness Check

We develop and execute customized strategies for utilizing innovative Industry 4.0 technologies. With our Digital Readiness Check we can identify potential areas and gaps which then form the basis of our clients' Industry 4.0 strategies. From the overlap between smart products, smart factory and smart services we derive the concrete potential for expanding the current service portfolio and target markets and increasing efficiency in operational production. It is our aim to generate significant market benefits and competitive advantages for our clients through the application of effective Industry 4.0 solutions.

### Lifecycle Management

The prerequisite for Industry 4.0 is a process-driven database with continuous data flow and a fully digital model of a product (digital twin). By simulating mechatronical processes such models can be linked up with reality. Production and service procedures are planned and tested, processes monitored and appropriate action is generated through parameterized triggers. Product Lifecycle Management is becoming the indispensable prerequisite for the next step in the industrialization and networking of processes and machines (Internet of Things).

### Smart Products

Networked and intelligent software components are the brain of a new product. Products already established in the market can be digitalized, however, at a calculable cost, enabling companies to defend or even strengthen their market position. Household and medical appliances can be individually configured, for instance, and adapted to the user's requirements using mobile apps. In a smart factory a continuous-flow data and information management system enables seamless integration in the production process. Via cloud services the wear and tear from usage can be recorded and valuable conclusions for production and product improvements drawn using data analytics.

### Collaborative Robotics

The use of collaborative robots marked the beginning of the future of Industry 4.0 in industrial production and assembly. Thanks to their design the robots are certified for direct and close collaboration with humans without any protective devices. The systems are partially self-learning, have artificial intelligence and can share their knowledge with other robots via the Cloud. Besides collaborative industry robots there will in future be an enormous potential for personal service robots which will help us as assistants in our everyday activities.



# Helbling Technik

Innovation, together we do it

## Helbling Technik

350 employees

Your Partner for Innovative Product Design through Collaboration

### Specialist Areas

- Product Innovation
- Mechanical and Electrical Engineering
- Electronics and Firmware
- Software Engineering
- Data Analytics and Internet of Things
- Calculation and Simulation
- Thermodynamics, Fluidics, Acoustics
- Microtechnology and Microsystems/ MEMS
- Measurement Technology, Sensors and Actuators
- Optics
- Signal and Image Processing, Algorithmics
- Automation and Robotics
- Mechatronics
- Plastics Technology
- Material Science
- Physics
- EcoDesign

### Industries

- Home and Office Appliances
- Transportation
- Medical Devices
- Automation and Production Machinery
- Service Industry and Public Sector
- Diagnostics and Lab Systems
- Energy & Smart Infrastructure
- Clean Tech
- Instruments and Tools

## Innovation is Teamwork

The big challenges of the future for our clients lie in the rapid advance of technology and in the growing complexity of new products and systems. This complexity is being increased and accelerated by the fourth industrial revolution with the potential offered by the Internet of Things, Big Data and Digitalization. New smart products and self-organizing systems are today frequently endowed with highly innovative characteristics incorporated in physical components, intelligent software solutions and online networkable interfaces. Only seasoned teams that cover a broad knowledge base and are committed to continuous learning are capable of managing the resulting complexity in development projects, and the cost pressures generated by global competition, with the necessary speed.

In this context we also understand the partnership with our clients and the collaboration with producers and suppliers as a chance to temporarily organize a "Team of Teams". Despite the agility of modern methods we believe in the combination of classical project management where deliverables, resources (costs) and deadlines can be planned and responsibilities assigned. Clients value this kind of commitment more than one-sided competition on price and this is the principal reason why demand for Helbling Technik's services grew in 2015 despite the adverse economic conditions.

More and more clients seek competitive advantage with their products and systems in the shape of clear differentiation characteristics coupled with a simultaneous increase in efficiency and effectiveness.

We help our clients with a multidisciplinary approach that opens up the potential for new ways of thinking and innovative processes. The basis is our know-how in product innovation, mechanical engineering and construction, hardware and software engineering, physics, optics, sensors, microtechnology/MEMS, data storage, and networking (IoT, Big Data) – to name just a few of our specialist areas. However, we try not to think just technically but also follow our intuition and create a good team spirit in our client projects. This may sound unusual to many technical experts – and it actually is. Yet, we consider it the only way to achieve the results for which Helbling Technik is well known, working in close collaboration and long-term partnership with our clients.



New Nespresso Prodigio™ machine with built-in Bluetooth® connectivity

© Nestlé Nespresso S.A.



**Walter Huber**, Partner  
dipl. Ing. FH  
CEO Helbling Technik



**Béat Stulz**, Partner  
dipl. Ing. FH  
Senior Vice President  
Bern



**Franz von Niederhäusern**, Partner  
dipl. Ing. ETH  
Senior Vice President  
Zurich



**Tom Russi**, Partner  
Dr. dipl. Ing. ETH  
Senior Vice President  
Aarau



**Harald Zurheide**, Partner  
dipl. Ing. FH  
Senior Vice President  
Aarau



**Urban Schnell**, Partner  
dipl. Ing. EPFL, Dr. es. sc. tech.  
Senior Vice President  
Bern



**Hans Tischhauser**, Partner  
dipl. Ing. FH  
Senior Vice President  
Wil SG



**Center for Transportation, Power Generation & Simulation**  
30 employees

**Center for Software Engineering & IT**  
35 employees

### Innovation Center Transportation, Power Generation & Simulation

At our innovation center in Aarau we focus on the development of safe products for public transport (rolling stock, amusement rides, cable cars, platform screen door systems). Our strengths include the conception and engineering of installations for the production, transformation, transportation and storage of energy as well as the development, programming and integration of electronic components for transportation systems. We conduct complex calculations of multi-physical phenomena, nonlinear processes such as crash and drop test simulations for a variety of materials, as well as computational fluid dynamics, earthquake and multibody system dynamics simulations. When conducted early on in the development process, simulations such as drop tests, flag up improvement potential and anticipate in the early development stages the findings of time consuming physical tests. This saves valuable time in the development cycle. We delivered an important contribution to safety and risk-free operation with our simulation and construction work for the globally unique figure-eight ferris wheel "Golden Reel" in Macao, China.



Development of the interior furnishings for the STADLER Articulated Multiple-Unit Albula train for the Rhaetian Railway RhB

### Innovation Center Software Engineering & IT

The core activities of the Software Engineering & IT center include the development of customized software solutions, such as the development of apps for device controls, web applications that support the digitalization of business and production processes, or data analytics solutions to capture valuable information from raw data. These applications cover all aspects of the software lifecycle from business and process analysis, system requirements, IT architecture and software development right through to service and maintenance. We are a reliable and trusted partner for our clients in the industrial, building automation, medtech and also service sectors when it comes to the development of scalable IT solutions. Some of the issues we dealt with last year were concepts and architectures for intelligent networks and communication in the fields of automation, production, service and maintenance. The digitalization of industry and service processes is spreading rapidly and is changing our world. With our software solutions we help our clients adapt their products and production processes to profit from this trend.



Connectivity between machines and devices, data analytics and machine learning enable process efficiency and novel services



© Nestlé Nespresso S.A.

Evoluo the new machine of the VertuoLine™, the new coffee system of Nestlé Nespresso S.A. using the unique Centrifusion™ technology

### Innovation Center Home & Office Appliances

In today's world, products and applications for daily use are so simple and easy to use that it is often hard to imagine what development, innovation and technological achievements lie behind the device you hold in your hand. Helbling Technik supports its clients from the ideation of the product through its development until it goes into series production, continuing to accompany the project even post mass production. In recent years we have continued to significantly expand our "embedded systems" activities, with success. By embedded systems we understand the development in large series of IoT networked electronic hardware and software as a component of end devices. The combination of mechanical development and embedded systems creates a special relationship between man and machine. This is achieved by means of material choice, the haptics, and in particular the intuitive user interface, using state-of-the-art control elements on the device.



Demonstrator of an accommodating intra-ocular lens (A-IOL) for cataract patients

### Innovation Center Medtech, Optics & Microtechnology

Our increasing life expectancy, our desire for individualism and the impact of affluence on our consumer behavior, hand-in-hand with rising costs in the area of health services, are demographic developments that exert an ever greater influence on medical technology. Our center for medtech, optics and microtechnology tackles these challenges together with clients to achieve major innovations that meet their needs. Active implants, drug delivery systems, biomedical optics (ophthalmology), hearing aids, medical electronics, neurostimulation and e- and m-health applications are just a few key themes in this fascinating world where medical technology is moving forward at an ever faster pace. The objective of the technology and product development projects we undertake together with large companies, mid-sized firms and also with promising start-ups worldwide is the design of scientifically and technically sound solutions that take economic considerations into account.



**Center for Home & Office Appliances**  
30 employees

**Center for Medtech, Optics & Micro Technology**  
45 employees



**Andreas Schneider**  
dipl. Ing. FH  
Head of Development



**Benno Steiner**  
dipl. Ing. FH, MAS BA  
Head of Development



**Andreas Suter, Partner**  
dipl. Ing. FH  
Head of Business Unit



**Rainer Maisch, Partner**  
lic. oec. publ.  
Head of Business Unit



**Jean-Noël Fehr**  
dipl. Phys. EPFL  
Head of Development



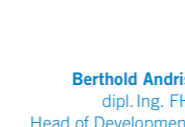
**Niklaus Schneeberger**  
dipl. Phys. ETH,  
Dr. sc. nat.  
Head of Development



**Hans Bernhard**  
Dr. sc. tech. EPFL  
Head of Development



**Hardy Melotti**  
dipl. Ing. FH  
Head of Development



**Berthold Andris**  
dipl. Ing. FH  
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**Daniel Hauri**  
dipl. Ing. FH  
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**Julian Yeandel**  
Msc. El. & SW, PhD  
Head of Development



**Emmanuel Gremion**  
Partner  
dipl. Ing. FH  
Head of Business Unit



**Stefan Troller, Partner**  
dipl. Ing. EPFL  
Head of Development





Helbling Technik Wil SG  
105 employees

### Innovation Center Wil SG

The innovation center in Wil SG is a competence center for interdisciplinary system engineering and precision mechanics. With a focus on healthcare & diagnostics, home appliances, power tools and beverage systems for both the consumer and professional markets, the center covers a broad portfolio and our technological and systems expertise enables us to develop products from ideation to their successful market launch. Our location in Shanghai also enables us to work on industrialization projects locally on site in China. Our guiding principle is that leading suppliers of products and solutions in the industrial, medtech and household appliance sectors should always be able to rely on our interdisciplinary, expert support. Last year we invested substantially in building new services and laboratory infrastructure. The central themes of our activities were connectivity and sensors, with the main emphasis on optics, regulatory services in the field of medtech and the successful expansion of our EMV infrastructure. In 2015, we again brought a number of client projects to maturity with successful product launches. The innovation center in Wil is an example of our interdisciplinary work and demonstrates how bold ideas can be transformed into products that are ready for market.



Development of an innovative mirror optic for the presence detector "Plano Spot" with an adjustable detection area (Theben HTS)



Development of the Nescafé Dolce Gusto beverage systems Stelia and Drop with automatic head and touch HMI



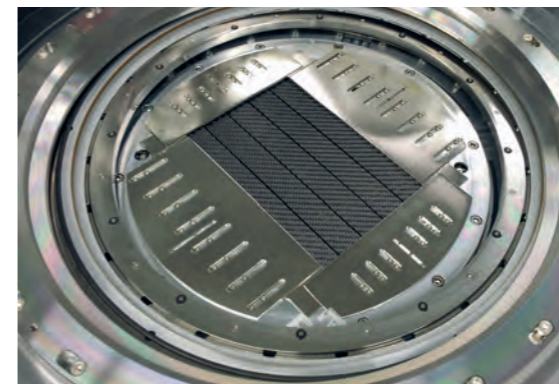
Mechanical design of the rotary evaporator Rotavapor R-300 (Büchi Labortechnik AG, www.buchi.com)



User interface software for GeneRead QIAcube – part of QIAGEN's "Sample to Insight" solution for Next-Generation Sequencing (NGS)



New flat-bed hot foil stamping and embossing machine ROFO 450 for narrow web applications (Gietz AG)



High-performance heating module for the process industry

### Innovation Center Zurich

The main activities of Helbling Technik in Zurich are the development of machines, production systems and devices in the industrial environment. The development process can involve whatever disciplines in mechanical engineering, mechatronics, electronics, software and industrial design may be required to execute highly complex system projects and challenging subprojects. We were repeatedly mandated by major clients in the mechanical and electrical engineering industries (MEM) to manage several large and complex innovation projects and new developments. We defined the deliverables for these projects in accordance with agile principles. In addition to methodology we also rely on the right set-up in teams that are as highly-performing and compact as possible and collaborate in their project islands on a cross-functional basis. In the field of industrial devices we worked on numerous projects relating to the precious resource "water". We also made major contributions in the development of collaborative robots. These assistants are being used in many applications where human and robot need to work closely together. We are excited to be collaborating with our clients on such solutions.



Helbling Technik Zurich  
60 employees



New lightweight robot manipulators simultaneously cooperating with humans (F+P Robotics AG)



Ralph Kugler, Partner  
dipl. Ing. ETH  
Head of Business Unit



Martin Federer  
dipl. Ing. FH  
Head of Business Unit



Michael Weibel  
dipl. Ing. FH  
Head of Development



Chris Gugl  
MSc. Biomed. Eng. ETH  
Head of Development



Christian Gärtner  
dipl. Ing. TU  
Head of Development



Johannes Eckstein  
dipl. Ing. FH, Dr. Ing.  
Head of Development



Gabriel Sutter  
dipl. Ing. FH  
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Markus Zbinden  
dipl. Ing. FH  
Head of Development Wil



Guido Brunecker, Partner  
dipl. Ing. ETH  
Head of Business Unit



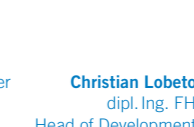
Stefan Huggenberger  
dipl. Ing. FH  
Head of Development



Andreas Portmann, Partner  
dipl. Tech. HF  
Head of Business Unit



Ueli Schläpfer  
dipl. Ing. EPFL  
Head of Development

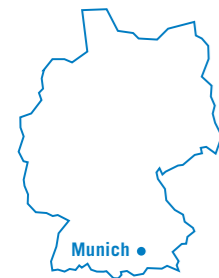


Christian Lobeto  
dipl. Ing. FH  
Head of Development



Thomas Hodel, Partner  
dipl. Ing. FH  
Head of Development





Helbling Technik Munich  
30 employees

### Innovation Center Munich

The focus of the innovation center in Munich is the development of electronics, power electronics and embedded software. From ideation right up to series production our clients in the industrial, consumer goods, automotive and medtech sectors benefit from our excellently equipped laboratories and tools, such as those for simulating magnetic components. The intelligent networking of products and systems (IoT, connectivity) and the efficient use of energy are topics that were at the forefront of our activities last year.

With innovative concepts in charging technology as well as in sensor and actuator technology we laid the basis for future consumer product series. We acquired valuable know-how through the internal development of a multi-level converter for electrical storage systems and also expanded our mechanical construction expertise, which we successfully applied in the development of an oven camera with WLAN connection. We are thus able to offer our clients complete product development from a single source.



Helbling Precision Engineering Boston  
15 employees

### Innovation Center Boston

The medtech and biotechnology industries are subject to rapid and continuous change. The extremely complex modelling of workflows and processes requires high-precision engineering in the development of ready-to-market solutions. Helbling Precision Engineering not only has the know-how and experience to help life science companies take a substantial step forward. Our center in Boston also has a strong network of client relationships in the American market and is familiar with the latest trends and the needs of firms in this sector. Our longstanding clients in Boston include in particular renowned companies and start-ups from the medtech, diagnostics, laboratory automation and biotechnology sectors.

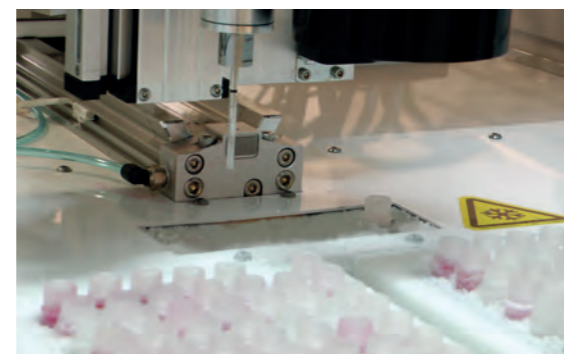
The lives of patients and medical personnel will be made easier in future through the use of automated and virtual applications. Data transfers via wireless solutions and automated drug delivery tools will have a decisive impact on the provision of medical services. We are proud to be active at the forefront of this research and development effort.



Electronic Drive Unit for Servomotors



Automatic Test System for Motor Control Units



Development of an automated Frozen Sample Aliquotter

# Helbling Business Advisors

Together we realize value



BKW – Business consulting by Helbling Business Advisors

Our motivation is to enhance or restore the competitiveness of our clients. Shifts in the balance of global economic power, fluctuations in exchange rates and commodity prices, the rise of new players in many industries and the efficient deployment of digitalization are only a few of the business challenges our clients are confronted with. Based on our integrated advisory approach we develop effective strategies and solutions to generate sustainable improvement in market position, profitability and capital efficiency. For many years, primarily mid-sized compa-

nies and divisions of large corporations have trusted in our expertise. This trust is based not only on the extensive range of our specialist capabilities, but also on our clients' benefit from profound practical experience we contribute to their specific projects.

As a competent partner we offer more than just advisory service to our clients: we enable them for the long-term. The positive feedback from our clients and another successful business year confirm us in our determination to pursue this philosophy.

### Helbling Business Advisors

65 employees



#### Operational Excellence

- Supply Chain Management
- Process Optimization/Cost Reduction
- Digitalization incl. Industry 4.0

#### Restructuring

- Strategic/Operational Analysis
- Turnaround Concepts/Implementation
- Financial Restructuring

#### Mergers & Acquisitions

- Sell & Buy Side M&A
- Succession Planning/Solutions
- Management Buy-out/Buy-in

#### Strategy

- Strategy and Organizational Development
- Commercial Due Diligence
- Post Merger Planning and Integration

#### Financial Advisory

- Business Planning & Financial Modelling
- Optimization of Financial Management
- Debt Advisory & Financing Solutions

#### Innovation Management

- Increase & Strengthen of Innovation Rate
- Development of Innovation Systems
- Value Increase of Innovation Portfolio



**Martin Eisenmann**  
dipl. Ing. TU  
Managing Director  
Munich



**Godert de Jager**  
Dr. sc. tech. ETH  
Head of Development  
Shanghai



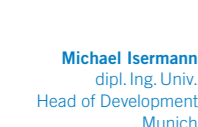
**Michel Bruehwiler**  
dipl. Ing. FH, MS/MBA  
Managing Director  
Boston



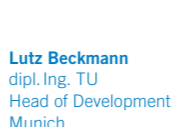
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skyguide and 4B – Business consulting by Helbling Business Advisors

### Restructuring

Established companies currently face entirely new competitors, partially from outside their industries, attacking them with “first and fast mover” or “winner-takes-it-all” business models. In addition, the sudden increase of the Swiss franc since the beginning of 2015 has intensified the pressure on margins for clients operating in Switzerland and resulted in a substantial decline in sales in many business sectors. Tendencies give rise to the assumption that the number of restructuring cases will continue rising in 2016 as well, both in Switzerland and in Germany. Viable earnings optimization programs will therefore acquire even more importance.

The key to stabilizing the situation and rebuild our clients' business success lies in the rapid development of effective concepts based on tailor-made measures and their consistent implementation. The fact that our restructuring experts have an in-depth knowledge of technological trends in addition to their business

acumen is a decisive criterion for success in time of digital changes.

### Operational Excellence

The effectiveness of operational processes in the age of globalization and digitalization is becoming the increasingly decisive factor in securing competitive advantage in the marketplace. Due to the speed of change and rising customer expectations, the management today faces complex new challenges.

In this environment, our operations team supports clients with tailor-made responses to their needs. We develop smart factory solutions, cloud-based digital services and strategies for the practical application of Industry 4.0 technologies for our clients. In addition, we draft value-enhancing concepts for the production of goods on a global scale, focused on optimizing a company's worldwide network of engineering, production and logistics locations (global footprint).

### Mergers & Acquisitions

External succession planning, the acquisition of technology expertise or portfolio optimization – M&A transactions have increased significantly. Complexity is increasing in the same degree along with the demands placed on management. The professional assistance of an external consultant is essential for the success of the M&A process.

We act as consultants on both the buy and sell side. On behalf of our clients we take care of the process management, contract negotiations and contribute substantially to maximizing the value of the transaction.

In case of cross-border transactions we are supported by our partners of Corporate Finance International. This collaborative effort provides us with intensive insights into local industry markets and close trustful relationships with important investors.

### Strategy

We develop strategies to ensure profitable growth for companies in different industries. We focus on organic, acquisition-driven and organizational solutions for the further development of business models, product innovation, market penetration and the opening up of new sales channels, customer segments and markets. Extensive possibilities offered by the digital revolution and opportunities for optimizing the global footprint are the main drivers of this process.

### Innovation Management


Advisory services in the field of front-end innovation are of great interest for many businesses. The efficient deployment of Industry 4.0 technologies and the entrance into new market segments combined with new business models present enormous challenges for many small and mid-sized companies.

With our in-depth experience of methods and industries we successfully support our clients in controlling, planning and operationalizing of their innovation processes.




M&A Transactions (extract)


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# Helbling Beratung + Bauplanung

Your Partner for Real Estate, Industry and Infrastructure Projects

## Helbling Beratung + Bauplanung

35 employees



### Industries

- Real Estate
- Industry
- Infrastructure
- Energy

### Services

- Energy Concepts for Sites and Buildings
- Feasibility Studies and Valuations
- General Planning with a Technical Focus
- Market and Location Analysis
- Optimization of Production Costs using the Pinch Method
- Profitability Calculations, Lifecycle Assessments
- Project Definition and Procurement Concepts
- Project Management for Project Owners
- Project and Risk Management
- Project Owner Advisory and Representation
- Second Opinions
- Site Development and Master Planning
- Specialized Planning Building Technology
- Studies and Expert Opinions/ Assessments
- System Integration for Process Engineering
- Technical Consulting Building Systems
- Technical Due Diligence

Helbling Beratung + Bauplanung is positioned in the market as an independent consultant for complex real estate, industry and infrastructure projects. We support both public and private owners as a provider of project owner advisory, technical consulting and engineering services. In 2015, we continued to expand our leading market position in these business segments. This applies particularly to our project owner advisory and representation services for private and public clients as well as services provided in the area of complex technical planning tasks.

### Real Estate

We designed innovative concepts on behalf of major real estate portfolio holders for value-enhancing site developments. In collaboration with the expert teams of



EAWAG: General planning: Refurbishment/new build of a laboratory building with MINERGIE-P-ECO certification

Helbling Business Advisors we provided valuable contributions in the context of valuations of companies with real estate portfolios. In addition, we were repeatedly engaged by private and public project owners to assume the overall management and perform the controlling function for large investment projects. Finally, we supported our clients in the technical modernization of their real estate holdings. Second opinions on real estate projects constituted an additional focus of our activities.

### Industry

We teamed up with Helbling Business Advisors and Helbling Technik to assist industrial clients in the strategic planning and execution of market-aligned offerings and their implications for buildings, plant and processes. Particularly in the planning

and execution of projects we were able to free up our clients by assuming the role of external project manager or system integrator for process engineering projects, thereby enabling them to focus on their core activities. Our activities also included the application of technically clever approaches to the optimization of resources with a view to reducing operating costs.

### Infrastructure

Infrastructures are based on the requirements of the society that travels on these networks or is supplied by them. These requirements often change before the completion of large projects. We helped our clients to gain an overview of emerging future requirements and the generation, structuring and management of such projects in line with these requirements. The services we provided include those of project manager, project owner, project owner's representative or project owner advisor, covering each stage in the process all the way from initial idea until final commissioning. These projects were aimed at the smooth transport of goods by road and rail, the supply of energy and water in line with needs and the purification and energy-generating treatment of sewage and waste.

### Energy

Like in previous years, we assist clients in structuring and executing infrastructure projects in the area of energy production and transmission, whether as electricity or district heating. There is still considerable demand, despite the low price of energy, for services relating to energy transformation and energy purchasing for industry as well as the optimization of energy consumption and related projects for the real estate sector and industry.



Canton Berne, Office for Property and Buildings (OPB): New build of Biel campus for University of Applied Sciences Berne (UASB) timber construction with MINERGIE-P-ECO certification



swissgrid: support for strategic purchasing New build 380kV power line Châtelard-Bätiaz



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# Helbling PLM Solutions

Enabling Innovation with Information Technology

## Helbling PLM Solutions

15 employees



### PLM Consulting

- Project Management
- Coaching
- Surveys, Audits and Analyses
- Organizational Consulting
- Process Optimization
- Methods
- Solution concepts
- IT Architecture/-Infrastructure

### PLM Solutions

Conception and Implementation based on the products:

- 3DEXPERIENCE Platform
- CATIA
- ENOVIA
- SIMULIA
- DELMIA
- SmarTeam

### PLM Services

- Training
- Support (Hotline; On-site)
- Customer specific developments
- CAM Postprocessors
- Outsourcing of System Support

## Product Lifecycle Management

Helbling PLM Solutions (formerly Helbling IT Solutions) is a leading provider of Product Lifecycle Management services and software. The aim is to enable cross-functional, performant and traceable collaboration across multiple locations from product development through manufacturing. The pressure to review and improve development processes and their digitalization has increased even more due to the economic environment and new requirements generated by the fourth industrial revolution. Our specialists were mandated in the past year to ideate, configure and put into operation aligned solutions for major customers. The majority of these projects were based on the future-oriented 3DEXPERIENCE platform of our partner Dassault Systèmes. In such implementations Helbling has attained a leading role.



Components of a washing machine in the 3DEXPERIENCE platform

Our existing and new customers are active in a wide variety of industries such as High-Tech, Aerospace, Transportation and Industrial Equipment. Our longstanding close partnerships with many of our customers are characterized by personal contact and closeness. This includes not only consultancy services, sales and tailored solutions, but also the continuous support during operation.



V-ZUG is the leading brand of Swiss kitchen and laundry appliances. Premium design and quality "Swiss-Made"



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The Helbling Group was founded in 1963 and is owned by its 31 managing partners. The internationally active engineering and consulting firm Helbling employs some 480 professionals in four business divisions focused on innovation/product development, management consulting, mergers & acquisitions, turnaround and financial performance management, information technology, real estate, energy and infrastructure.

## Helbling Group

Valuable through Innovation