

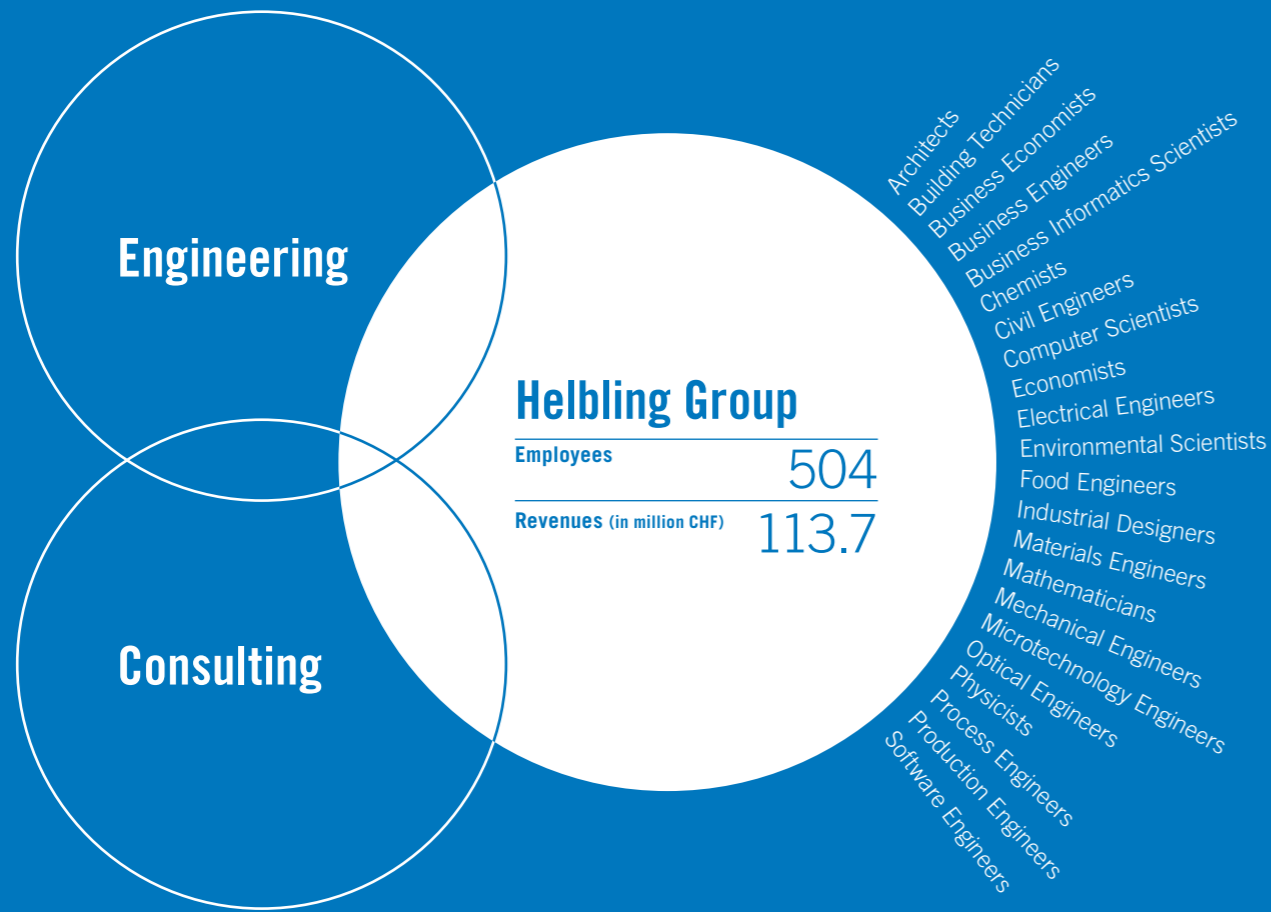
helbling



## Company Portrait and Business Year 2016

**Helbling Group**  
Valuable through Innovation

# We realize innovations efficiently and solve entrepreneurial tasks



Helbling Technik	Helbling Business Advisors	Helbling Beratung + Bauplanung	Helbling PLM Solutions
Employees 355	Employees 75	Employees 45	Employees 15
Revenues (in million CHF) 78.4	Revenues (in million CHF) 18.2	Revenues (in million CHF) 10.1	Revenues (in million CHF) 7.0
Locations Aarau, Bern, Boston, Munich, Shanghai, Wil SG, Zurich	Locations Düsseldorf, Munich, Stuttgart, Zurich	Location Zurich	Location Zurich

# Use What You Have, Create Something New

## Dear Readers

10 years ago Steve Jobs presented the iPhone, the device that changed the way we communicate with each other for ever. Thanks to Apple we can now carry our entire office around with us in our pocket – with all the advantages and disadvantages that brings. Naturally the public was mightily impressed at the time; the run on the iPhone was sensational as a result. However, the Californian company's smart phone invention was not totally new. In fact a large part of the technology that characterizes the iPhone already existed. Apple's singular success was to be the first ever firm to pick the best qualities of existing iPods, mobile telephones, digital cameras, accelerometers, GPS and touch screens and combine them in such a way as to open up a host of completely new possibilities for the user.

Today we cannot imagine life without a smart phone, but that does not mean its development is at an end by any means – on the contrary. Digitalization is forging ahead rapidly and every company, whether big or small, must face up to this challenge. The Helbling Group's declared aim is to support our clients in this demanding task.

The strong Swiss franc, Brexit, Trump, terrorism... the year 2016 was a turbulent one, not only from the geopolitical point of view, but also in terms of the economy. In this rapidly changing environment the Helbling Group can report a very successful year of growth that ended with revenues at a record level. This achievement is due to our clients in particular, the majority of whom we collaborate with in long-term partnerships.

We trust in our strengths for the continuation of this success, always bearing in mind our guiding principle: Valuable through Innovation. Innovation is the key force that drives us forward. In a world full of challenges where the pace of technical progress is unrelenting, this applies more than ever. In developing new products, designing infrastructure projects or revamping business models: we will commit all our energies to making our clients successful in the future. We cannot always reinvent the world. Nevertheless we will continue to build the best teams, optimally enriched with our know-how, state-of-the-art tools and the latest technologies in order to create something new in every situation that presents itself. We have been doing this not only since the launch of the iPhone but since 1963. We look forward to accompanying you on the continuation of our shared journey into the future.

Sincerely yours

Dr. Christian Péclat  
Chairman of the Board  
CEO



Marcel Fäh  
Member of the Board  
CFO



# Continuity and Innovation Bring Success

The Helbling Group looks back on a successful business year in 2016. Revenues were up 6.3% to a record CHF 113.7 million. In the past year, we also hired 25 additional members of staff and added one management executive to our group of partners.

What began in 1963 as a small engineering office has developed over the years to become a major Swiss engineering and consulting firm. In 2016 as well, the Helbling Group achieved further growth and continued to develop its business divisions successfully.

There are many reasons for the Group's ongoing ability to compete successfully in the marketplace. One of them is the fact that our service offering is constantly adapted to the evolving developments in markets and technology. By continuously expanding our expertise and knowledge we are securing our survival as a company – and are simultaneously strengthening the innovative and competitive ability of our clients around the world. These consist of large corporations and corporate business divisions as well as startups, and are almost always regular clients. They all value our broad range of capabilities in the divisions Helbling Technik, Business Advisors, PLM Solutions and Beratung + Bauplanung.

## Experience, Efficiency, Versatility

Digitalization is a megatrend in today's world. Many view it as an enormous opportunity, while others warn against the possible dangers it may entail. One thing is clear: nobody can slow down or even prevent the onward march of technical progress. In the Helbling

Group we have therefore made it our core mission to stand by our clients and help them face the challenges of the future. The decisive element here is our pursuit of innovation. Helbling has a unique combination of technology expertise and business consulting skills which places it in an excellent position to tackle complex projects simultaneously from a specialist, technical and overall business perspective. Concepts that work and the versatility of our approach are what clients like and value about Helbling – and expect from us in the future as well.

## A worthwhile investment

Last year we added another 25 professionals to our staff. Our Group currently employs some 500 engineers, architects, IT specialists, physicists, business administration graduates and economists in Switzerland, Germany, the USA and China. Due to jointly defined standards and an extremely high level of quality consciousness each one of our professionals contributes substantially to our company's ongoing successful development. And one of the things we are especially proud to mention: the people we hire generally stay on board. Staff turnover in the Group remained below 10% in 2016 – an extremely low rate for a service sector company.

We go to great lengths and expense when it comes to recruiting and educating our employees. In recruiting our teams we set great store by professional competence while at the same time bearing in mind that intelligent people are to be found everywhere. Success is most visible when we are able to forge a strong community from a group of outstanding individuals.

Team ability is consequently an essential part of our corporate culture. Educating young talents is an endeavor close to our heart because we are convinced that you reap what you sow. What is more: our educational efforts contribute importantly to bridging the gap between universities and the corporate sector.

## Financial Independence

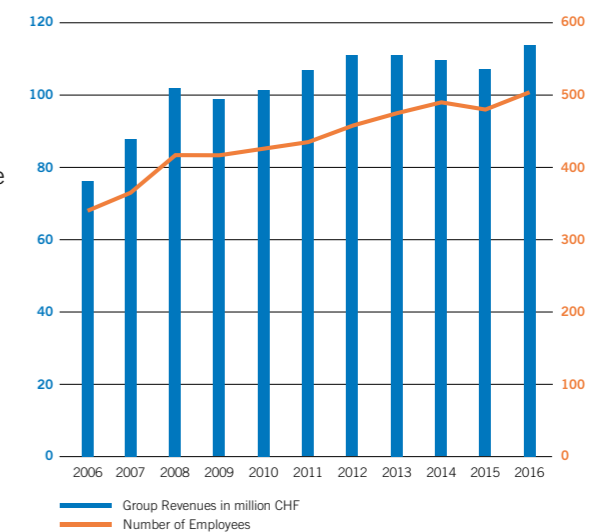
Due to consistent and successful efforts the Helbling Group remained on a financially sound footing in the year under review. Operational cash flow increased from CHF 10.6 million to CHF 12.8 million, enabling us to make targeted investments in the further development of our services, infrastructure and the labs at our various locations. Our equity ratio remained at 60%. As in previous years, this gained us a top rating for privately held mid-sized companies awarded by the banks, thus securing our long-term independence.

## 29 Partners and over 220 Participation Certificate Holders Ensure Continuity

After 32 years in the Helbling Group Dr. Reto Müller stepped down from his position as Chairman of the Board of Directors of the Helbling Holding in 2016. This change in the Board of Directors was planned well in advance and was professionally managed.

There were also changes in the group of partners, which was increased by a new partner last year. The current 29 partners are executives who are capable of networked thinking and getting things done and have the appropriate social competence and special professional expertise. In addition, we have no less than 220 holders of participation certificates. Together with the body of our employees they all ensure the long-term stability and success of our Group.

We have already made a successful start to the new year 2017 and look forward to supporting our clients with a full suite of professional services in the areas of strategic and operational business management, delivered in the manner that our clients and partners have come to expect from us: with head, heart and determination.



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



**Christian Péclat**, Partner  
Dr. sc. tech. EPFL  
CEO



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



**Bruno Berther**, Partner  
Head of Controlling



**Kathrin Schwarz**  
Head HR Administration



**Marcel Fäh**, Partner  
lic. oec. publ.  
CFO



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



**Christoph Rothlin**  
CIO

# 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 worldwide project experience.

## 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

### Clients are our livelihood

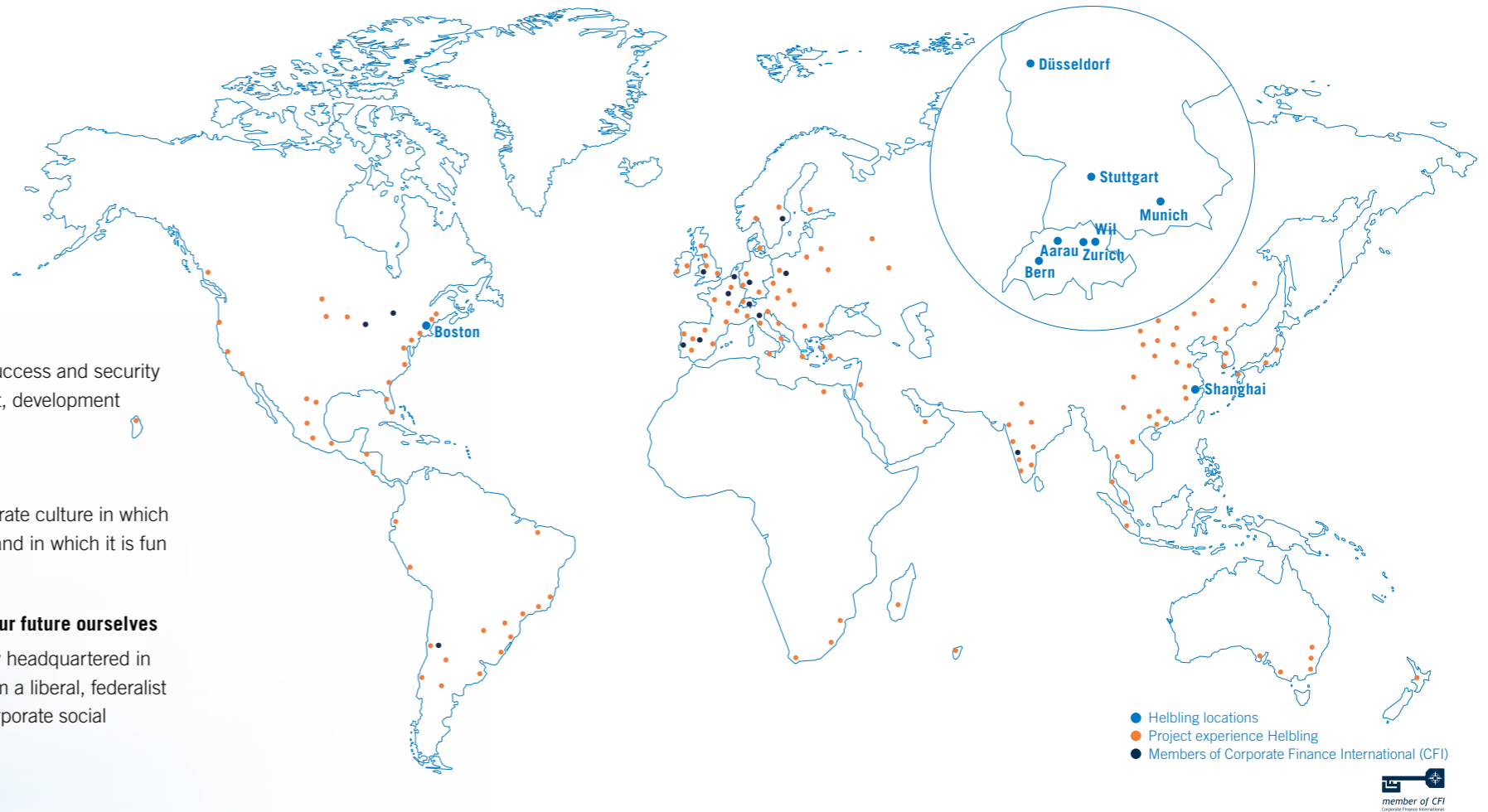
We meet our clients' needs for success and security with advice, project management, development services and implementation.

### Employees make markets

We promote and nurture a corporate culture in which our employees feel comfortable and in which it is fun to achieve top results together.

### We are independent and shape our future ourselves

We are an independent company headquartered in Switzerland. Our values arise from a liberal, federalist attitude with a high degree of corporate social responsibility.



## 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 – we're well into it ...

Digitalization is neither a trend nor a movement, it is the number one driver for change. Digital capabilities and solutions have become the prime competitive factor.

Networked products and machines are the prerequisite for efficient, resource-saving production; intelligent networked systems are indispensable if companies are to respond rapidly to individual client wishes and unleash new potentials. Non-digital products will become obsolete in the years ahead or at best substitutable standard products; non-digitalized production will become a competitive disadvantage.

Technology alone, however, does not differentiate products. Companies must resolutely embrace transformation from goods manufacturers to networked product providers. It will no longer be a case of fulfilling customer needs with products and services, but identifying and satisfying customer wishes and potentials even before the customer becomes aware of them.

The Helbling Group offers digital capabilities under one roof. Our professionals are equipped with in-depth knowledge of all the dimensions of digital transformation and assist clients with complex technical innovations as well as helping them adapt existing structures, business models and processes.



### Digital Supply Chain

The digital supply chain dissolves the divisions between conventional discrete business processes of producers, suppliers and customers with the aim of providing all the players involved with a new kind of virtual production and market platform for products and services. Its potential does not consist solely in the acceleration of production and logistics processes and the avoidance of supply chain disruptions. With a digital supply chain it is possible to build completely new business models and transport new products and services to new markets. It enables a global, virtually self-organizing system for steering manufacturing and service networks that transcends the limits of the individual company. A digital supply chain is the basis for the transformation from a traditional manufacturer to a networked product provider.

### Cyber Physical Systems (CPS)

Cyber-physical systems (CPS) are a component of the Internet of Things (IoT) and connect the physical with the virtual world. The combination of mechanical with electronic software components enables cyber physical systems to communicate with intelligent, networked industrial production and logistics units (cyber-physical production systems). They can “talk” to each other, steer each other autonomously and cooperate on their own initiative in highly flexible manufacturing processes via a man-machine or machine-machine production network. Robots are no longer just a programmable piece of automation equipment but are transformed into agile, production assistants acting individually in a highly efficient, flexible and responsive supply chain.

### Predictive Maintenance

The aim of predictive maintenance in manufacturing is to avoid unforeseen machine outages and static maintenance intervals by means of intelligent, learning outage forecasts, thereby enabling optimal production planning and top machine utilization rates. On the basis of real-time data in a big data cloud all the relevant parameters of the objects involved in the manufacturing process are recorded. These include machines, workpieces, tools, materials, assemblies and material supply systems. Stream Analytics are used to check the data cloud for anomalies and correlations not yet identified. In the following machine learning process, specific errors or event patterns are identified on a timely basis and hence the causes of a problem. This leads to lower reject rates and the highest possible availability levels over the entire production line life cycle with the result that productivity is higher while production costs are lower.

### Digital Twin

A digital twin is the digital replica of a real object and contains its current product status, manufacturing history and also detailed deployment and usage data. The digital twin is the key element of a digital factory. With its very specific DNA for each product, assembly or individual part, manufacturing costs can be substantially reduced because workpieces find the optimal path through the production line by themselves. The digital virtual twin makes it possible to create new offerings based on the use and connectivity of all data in everyday practice and to thus respond easily and appropriately to customer needs.

# Helbling Technik

Innovation, together we do it

## Helbling Technik

355 employees

Your Partner for Innovation and Product Development through Cooperation

### Specialist Areas

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

### Industries

- Home and Office Appliances, Consumer Goods
- Medical Technology
- Diagnostics and Lab Systems
- Automation and Mechanical Engineering
- Transportation and Mobility
- Energy and Smart Infrastructure
- Service Industry and Public Sector
- Clean Tech
- Instruments and Tools

### Innovation Management

- Innovation Pre-Projects
- Product and Cost Management

## Innovation is the Product of Teamwork

In the reporting period the demand for innovation services resulted in a pleasing increase in revenues for Helbling Technik. Given the ongoing difficult economic environment and an extremely competitive global marketplace, this may seem astonishing at first sight, but it is no surprise to us. Creative innovation services are not measured in the hourly rates of individual engineers, but in the actual success of projects. Wherever creativity and innovation are in demand, the question is not who can offer engineering excellence at the cheapest price, but where and how it can be generated most effectively. Our clients trust in our innovative, technological capabilities, from which we again reaped the benefits and which enabled us to further increase the number of our development teams in the year gone by. As in many other areas, successful developments do not happen by chance, but are the result of planning and well-structured teamwork. Helbling Technik's decentralized organization with 35 development teams in seven locations in Switzerland, Germany, USA and China is structured by service focus points combined with industry know-how.

The growing complexity of projects and major innovation breakthroughs requires multidisciplinary and multilocational collaboration within Helbling Technik or with other business divisions in the Helbling Group.

In order to offer our clients product developments that embrace a multi-faceted knowledge base we form a temporary project organization along the lines of a team of teams. It is this multidisciplinary approach that enables us to evolve new ways of thinking and innovative processes based on our deep base of knowledge in the technologies and industries listed in the adjacent column. The decisive criteria for a project's success are an efficient project management that combines new agile development methods with a solid process planning to which everyone is committed, determines appropriate resources and agrees deadlines that meet the client's specific expectations.

The essential factor in bringing an innovation project to a positive result remains, however, the collaboration between our clients and the other project partners, such as designers, producers, suppliers or institutes. Despite the many different possibilities offered by digitalization, the factor emotion in particular is of extreme importance in the innovation process. Our clients rely on our knowledge and capabilities. What is crucial to every project, however, is how we apply in practice what we collectively know. Innovation is the product of teamwork and especially teamwork with our clients as well.



USM Haller E "Light puts things in focus"

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CEO Helbling Technik



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dipl. Ing. FH  
Senior Vice President  
Wil SG





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

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

### Innovation Center Transportation, Power Generation & Simulation

Our innovation center in Aarau focuses on the development of products for the safe transport of persons and goods. These include rolling stock, amusement rides, cable cars and subsystems. We provide responses to all the issues presented by our clients, from studies to concepts, engineering and certification, taking into account the normative specifications, measuring any specific requirements outside the norm and fusing these into successful products in collaboration with our clients. We cater to the needs of passengers for comfort and information with our skills in developing, programming and integrating electronic components in transportation systems. Our strengths also include the conception of installations for the generation, transformation, transportation and storage of energy as well as complex calculations of multiphysical phenomena, nonlinear processes such as crash and drop test simulations, as well as the verification of these simulations by measurement. Milestones in our work were the development tasks mandated by our clients for the interior furnishings of state-of-the-art train carriages (STADLER EC 250) and the engineering work on projects for the refitting of locomotives (SBB Re 460).

### Innovation Center Software Engineering & IT

We are in the middle of the fourth industrial revolution. The common denominator behind artificial intelligence, robotics, the Internet of Things and digitalized production is information and communication technology. The core activity of the innovation center Software Engineering & IT is the development of customized software solutions, whether they be mobile solutions for service activities, software for controlling devices, web applications that support the digitalization of business and production processes or data analytics solutions that capture valuable information from raw data. These applications cover all aspects of the software life cycle from business and process analysis, system requirements, IT architecture and software development right through to service and maintenance. For our clients in industry, building automation, medtech as well in the service sector we are a reliable partner when it comes to the development of scalable software solutions. With our carefully developed bespoke software we help our clients adapt their products and value chains and generate crucial competitive advantage for their businesses through digitalization.



SBB Re 460 modernization project involving project management, weight tracking and component integration



Systems engineering for the air-cooled condenser at the Inner Mongolia Halun Energy Co. steam power plant Bayanhaote (2x330MW) in China



Industry 4.0 – software system supporting the molding process for x-ray tubes



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



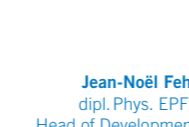
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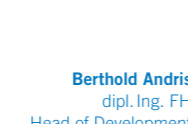
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Head of Business Unit



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



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Brewing Unit for Hotel, Restaurant and Catering Applications with drastically increased longevity due to targeted design optimization

### Innovation Center Home & Office Appliances

The design of successful innovative products and applications for households, offices or hotel/restaurant and catering businesses requires agility in their development, innovation and the integration of technology. We assist our clients from the ideation of the product through process modeling and development until it goes into series production, continuing to accompany the project even beyond the start of mass production. Thanks to our expertise in systems engineering, in the development of mechanical and electronic hardware and software, and in physics, we generate products that create a special relationship between man and machine and are characterized by reliable functioning, ingenious materials and telemetry (e.g. the way they are connected via the IoT). In recent years we have continued to expand the process simulation sector in particular. Here we model physical processes and verify them experimentally, which results in a more reliable and targeted development and moreover promotes a direct exchange with the client.



Crosslinking (CLX) device for the treatment of corneal infection and keratoconus, a degenerative disorder of the eye with structural changes and conical deformation of the cornea

### Innovation Center Medtech, Optics & Microtechnology

Cost pressures, increasing regulation in the development and licensing of products plus the trend towards individualization and personalization in society are the driving forces in the health industry. In the cross-currents of this trend business models and innovation processes are subject to change. Digital technologies for consumer goods and the IT industry combined with miniaturized, portable devices offer alongside leading-edge technologies new diagnostic and therapeutic possibilities in healthcare. These products can be used equally well in operating rooms, doctors' surgeries and in the everyday lives of patients. Our innovation center Medtech, Optics & Microtechnology tackles these changes together with its clients to achieve major innovations that meet their needs through the use of diverse basic technologies. The design of technically sound and economically viable solutions forms the basis for the successful technology and product development projects we undertake together with large corporations, mid-sized firms and with creative start-ups worldwide.



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

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



Helbling Technik Wil SG  
108 employees

### Innovation Center Wil SG

The advent of Industry 4.0 and with it digitalization has opened up entirely new business opportunities for our clients that demand appropriate alterations to their business models as well as new products that are adapted to the fast-emerging industry environment. By developing services and investing in tools and laboratory infrastructure we are optimally prepared for this trend and were therefore able to successfully execute various projects in this central area of our activities during 2016. The further development of the technological, methodical and regulatory aspects of our services will also be a major focus of our efforts in 2017. In order to remain abreast of modern developments we will make further investments in our tool environment and our lab infrastructure that will equip us for the future. Our innovation center in Wil is the competence center for interdisciplinary systems engineering. 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. Our technological as well as our systems expertise enables us to develop products in an international environment from ideation to their successful industrialization.



New widefield confocal microscope ZEISS Smartproof 5 for industrial applications



Nescafé Dolce Gusto coffee machine "Eclipse"

© Nestlé S.A.



Fixcontrol GmbH, Sports-Device: Datalogger, Cronometry, Scoring

© Timo Kellenberger



Healthcare & Diagnostics: Electronics for implantable active device



Development of a Liquid Adapter System with integrated RFID-Technology



Development of IoT end devices in the heating sector, fitted with E-Paper and dedicated ultra low power radio

### Innovation Center Zurich

The core business of Helbling Technik in Zurich is the development of machines, production systems and devices for clients in an industrial environment. In these highly complex system projects we apply the full range of disciplines required such as innovation management, mechanical engineering, mechatronics, robotics, electronics, software and industrial design. In the year under review we were again mandated by renowned clients to manage several large and complex innovation and development projects. It takes seasoned teams with technological expertise, creativity, proven methodology and intensive collaboration to realize such projects. Many of these projects start in the early stage of innovation, where future products are defined in the preparatory project in order to implement them in a targeted and directed fashion in the main project. Beyond this, we also make major contributions to projects in the field of international work planning. We look forward to providing our clients in the mechanical and electrical engineering industries (MEM) with reliable and comprehensive support in tackling the challenges and seizing the opportunities that lie ahead.



Helbling Technik Zurich  
62 employees



Development and design of a 5-axis CNC Tool Grinding Center



Ralph Kugler, Partner  
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Head of Business Unit



Chris Gugl  
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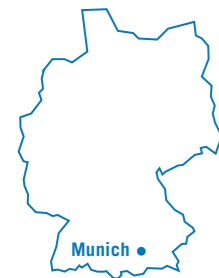


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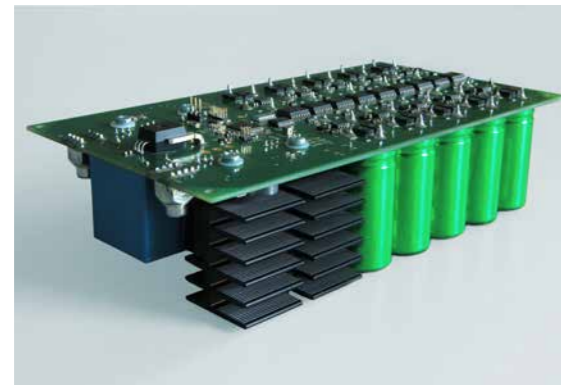


Helbling Technik Munich  
30 employees

### Innovation Center Munich

Embedded systems are used in a multitude of applications and industries. Largely invisible to the user, these systems perform complex tasks, from data capture and processing to secure online communication. The innovation center in Munich provides its clients with full assistance in the conception and development of such embedded systems from ideation right up to series production.

Last year we further expanded our laboratory, enabling us to build, test and adapt prototypes more securely and rapidly. With creative concepts and functional models for mechanics and electronics we encountered positive responses from significant clients in the consumer goods industry and were able to lay the basis for successful further developments. In the medtech and automotive sectors the focus of our activities was on producing and testing hard and software with security-relevant characteristics. We look forward to putting these developments into series production and tackling exciting issues in the field of embedded systems in the current year.



Scaleable electrical storage system for recuperation modes

### Innovation Center Boston

There is hardly an industry that is growing and changing as fast as medtech and biotechnology. This is due for one to demographic change and for another to the considerable rise in standards of living. Illnesses can be diagnosed more rapidly and can be treated with methods that are constantly improving. This speed requires broad professional expertise and extreme flexibility from all those involved. Helbling Precision Engineering has been developing innovative products for renowned firms and start-ups in the medtech, diagnostics, laboratory automation and biotechnology sectors for years and thus contributes substantially to progress in the field of life science. The lives of patients and medical personnel will continue to be made considerably easier in future through the use of automated and virtual applications. Automated drug delivery tools and the wireless transfer of data will have a decisive impact on the provision of medical services. We are proud to play an active part in this development and to contribute significantly to this research and development effort with our creativity and know-how.



Miniature and easy-to use dual chamber autoinjector



Helbling Precision Engineering Boston  
15 employees

# Helbling Business Advisors

Together we push your business



The Schleuniger Group and Helbling Business Advisors win the ASCO Award 2016 for "Best Business Transformation"

As digitalization spreads to all areas of business, our clients are experiencing increasing challenges. External factors such as a more difficult geopolitical situation, ECB monetary policy, the need for digital transformation or the trend towards deglobalization are typical for the business environment in which our clients operate. They result in a substantially greater pressure for change.

We are not part of politics but our knowledge and experience of complex structures in the areas of corporate finance, operations, digitalization and strategy enable us to

assess the impact on the economy. While recognizing the risks as well as opportunities, we aim at stabilizing and enhancing our clients' success.

With our systematic approach to complex tasks we focus on the needs of our clients. We build on the existing potential and design individual concepts that lead to a sustained improvement in market position, profitability, and capital efficiency. Yet another successful business year and the positive feedback we receive from our clients encourage us to continue our result pursuit of this philosophy.

### Helbling Business Advisors

75 employees



#### Restructuring

- Strategic and Operational Analysis
- Turnaround Concepts and Implementation
- Financial Restructuring Expertise
- Business Planning and Financial Modeling

#### Mergers & Acquisitions

- Sell- and Buy-side M&A
- Succession Planning and Solutions
- Management Buy-outs and Buy-ins
- Debt Advisory and Financing

#### Operational Excellence

- Supply Chain, Production and Procurement
- Process and Cost Optimization
- Business and Innovation Management
- Digitalization and Industry 4.0

#### Strategy

- Strategy and Organization
- Marketing and Sales
- Performance Management
- Transformation and Change Management



Matthias Moll  
dipl. Ing. TU  
Head of Development  
Munich



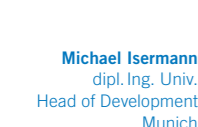
Godert de Jager  
Dr. sc. tech. ETH  
Head of Development  
Shanghai



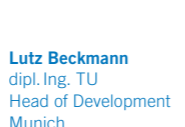
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Hawa Sliding Solutions AG – Business consulting by Helbling Business Advisors



Ypsomed AG – Business consulting by Helbling Business Advisors

### Restructuring

Export-oriented economies such as Germany and Switzerland are particularly vulnerable to protectionist tendencies, a reaction to globalization we have been observing over the course of recent years. They are therefore profoundly impacted by the impinging threat of trade barriers, the current market dynamic and the resulting pressure to take action. On top of this, companies must embrace digitalization and abandon their entrenched strategies as fast as possible, if they are to remain successful in the future. The importance of practicable revenue optimization programs introduced on a precautionary basis will become even greater in 2017.

We assist clients in implementing new business and management models, develop customized concepts that enable them to increase revenues while optimizing the cost impact over the long term and securing the financing structure they require. Our aim is to improve our clients' competitiveness with preventive solutions that take effect well before the onset of crisis situations.

### Mergers & Acquisitions

The number of companies that have corporate succession planning on their agenda continues to grow from year to year. Consolidations within individual industries, carve-outs aimed at achieving synergy effects, and an increasingly interconnected world in which strategic partnerships can generate decisive competitive advantages – these are currently the major factors driving M&A transactions.

Our M&A consultants have a comprehensive spectrum of professional and industry skills combined with long-term years of experience and profound technology expertise. We help our clients tackle all strategic issues throughout the M&A process, thereby securing the transaction's success. Through close collaboration with our partners at Corporate Finance International we have penetrating insights into local industry markets and contacts to important and trusting investors worldwide.

### Operational Excellence

The real-time digital world requires a high degree of integration and standardization. If companies are to ensure business success in the digital era, they must standardize and automate their processes. Products must be individualized, structures flexibilized and technologies embedded in the business model.

Our operations experts offer effective, value-enhancing concepts for the globally networked supply chain. We focus on optimizing a company's worldwide network of engineering, production and logistics locations (global footprint), as well as procurement, sales and customer service. We model the dynamic and flexibility driven by the market, thereby simplifying the major operational processes. A company's product range, offering, and pricing are the key levers that can be adjusted to satisfy the demands of customers and markets and achieve both a significant cost reduction

as well as profitable growth. Innovative Industry 4.0 technologies, smart factory total solutions, automation, and end-to-end IT-supported processes: we identify our clients' strategic or cost-reducing potential and assist them in their successful digital transformation. Our goal is to generate clear competitive advantages and added value.

### Strategy

Especially for companies in technology-driven industries, we develop strategies for profitable growth. We focus on organic, acquisition-driven and organizational solutions to further develop their business models, product innovation, market penetration, new sales channels, customer segments and markets. The extensive possibilities offered by the digital transformation and the opportunities for optimizing the global value chain are the main drivers.



M&A Transactions (extract)

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Zurich

# Helbling Beratung + Bauplanung

Your Partner for Real Estate, Industry and Infrastructure Projects

## Helbling Beratung + Bauplanung

45 employees



### Industries

- Real Estate
- Industry
- Infrastructure
- Energy

### Services

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

Helbling Beratung + Bauplanung is positioned in the market as an independent consultant for complex real estate, industrial and infrastructure projects. We support both public and private owners as a provider of project owner advisory, technical consulting and planning services. In 2016, we continued to expand our leading market position in these business segments. This applies in particular to our project owner advisory and representation services for private and public clients as well as services in the area of complex technical planning tasks.

### Real Estate

During the year under review we were mandated by major real estate portfolio holders to design innovative models for



Assistance/organization for investors in the competitive tender for the Hardturm development

value-enhancing site developments. In close collaboration with Helbling Business Advisors we successfully assisted clients participating in the competitive tender for investors in the Hardturm development site. In addition, we supported our clients in the technical modernization of their real estate holdings and the energy supply for building sites as well as in quality assurance. In addition, we were again engaged by private and public project owners to perform the overall management and controlling function for large investment projects.

### Industry

In close collaboration with Helbling Business Advisors and Helbling Technik we assist industrial clients in the strategic planning and execution of market-aligned offerings

and their implications for buildings, plant and processes. In the planning and implementation stages of these projects we assume the role of external project manager or system integrator for process engineering projects, thereby enabling our clients to concentrate fully on their core activities. Our services during the year also included programs to reduce operating costs using technically clever approaches to the optimization of resources.

### Infrastructure

Infrastructures are the lifeline of sustainable societies. While basic infrastructure needs are universal, specific requirements play an important role to ensure the community-appropriate public systems and facilities. We help clients define these requirements holistically and manage the execution of the resulting construction projects. From idea inception to final commissioning, our work serves to plan, develop and build the infrastructures that support safe and efficient transportation of goods and contribute to the economic prosperity and wellbeing of communities.

### Energy

We assist clients in structuring and executing infrastructure projects in the area of energy production and transmission, whether as electricity, natural gas or district heating. We were pleased to note in the year under review that despite the low price of energy, the demand for services in the field of energy transformation and energy purchasing for industry, as well as for the optimization of energy consumption and related projects in the real estate sector and industry is still high.



Remodeling and extension of the Burgerbibliothek in Bern: owner representation as overall project manager



Planning a power plant for the Cantonal Hospital, St. Gallen: new main boiler with satisfied client



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CEO Helbling Beratung + Bauplanung



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dipl. Ing. ETH  
Senior Vice President



**Martin Gähwiler**, Partner  
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Senior Vice President



**Martin Kessler**  
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Teamleader



**Gian-Reto Peer**  
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Teamleader

# 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/IT Infrastructure

### PLM Solutions

Conception and Implementation based on the products:

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

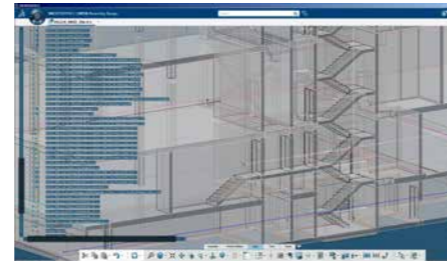
### PLM Services

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

## Product Lifecycle Management

Helbling PLM Solutions 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 difficult currency situation as well as the growing challenges such as Process Digitalization, Internet of Things and Industry 4.0 demand our customers to constantly review and improve their development processes.

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.



SLIK Architects rely on the 3DEXPERIENCE platform "On the Cloud" for their Building Information Modeling processes.

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. Our services include consultancy, sales and tailored solutions as well as the continuous support during operation.



The Emil Frey Racing Team is developing a racing car "On the Cloud" for the Blancpain Endurance Series.



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dipl. Ing. TS  
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**Karlheinz Ribar**  
Senior Consultant PLM  
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The Helbling Group was founded in 1963 and is owned by its 29 managing partners. The internationally active engineering and consulting firm employs some 500 professionals in four business divisions focused on innovation/product development, management consulting, mergers & acquisitions, restructuring, information technology, real estate, energy and infrastructure.

## Helbling Group

Valuable through Innovation