sitem-insel: straight from bench to bedside

PORTRAIT OF A CEO
Nicole Loeb

HIDDEN CHAMPION
Bien-Air Dental SA

START-UP
Four new, ambitious companies introduce themselves

LIVING / CULTURE / TOURISM
New holiday resort puts Meiringen firmly on the tourist map
Implementing tax reform successfully

Tomorrow starts today

The new tax reform will significantly influence competition in Switzerland so preparing for changes in advance is vital. Our tax experts in the Bern region advise you throughout the process of planning and implementing suitable measures. Discover the benefits of your own local contact combined with the expertise of KPMG’s global network. kpmg.ch

Frank Roth
+41 58 249 58 92
frankroth@kpmg.com

Hans Jürg Steiner
+41 58 249 20 57
hsteiner@kpmg.com
Dear reader,

It started with a vision for the Canton of Bern as a medical hub, a call from the powers that be for sitem-insel AG to embody something truly new. Professor Felix Frey turned this vision into a concept and, with private-public cooperation, into an international flagship for the Canton of Bern as a medical hub. The Department of Economic Affairs, represented on the sitem-insel management board by its secretary general André Nietlisbach, played a substantial part in this.

Since 2019, sitem-insel has been the youngest and newest face of the medical hub: a building dominated by glass. Inside, it is transparent and open; it announces that it is not the outside that counts, but the inside, where ideas and findings from research are transformed into marketable products through inter-disciplinary cooperation. Sitem-insel is, after all, an interdisciplinary platform for cooperation between researchers, physicians and entrepreneurs. And last but not least, sitem-insel offers opportunities for us all – especially, perhaps, when we are patients.

We are delighted when the Canton of Bern is able to act as a facilitator, supporter and partner to you: not only at sitem-insel (page 4), but also for setting up a branch in Brazil for Bien-Air Dental SA, for example (pages 14/15), or for a study for the Swisspeak Resorts Meiringen project (pages 18–22).

And we work hard every day to help your projects succeed, recognizing and sharing the desire to achieve common goals. You can feel this spirit in the sitem-insel project. One of the main stakeholders in the process put it this way: All the players immediately said yes out of conviction. I would like to take this opportunity to thank all those who appreciate the reliability of the Canton of Bern and place their trust in the administration.

Yours truly,
Dr. Sebastian Friess
Head Official, Office of Economic Affairs
President, Bern Economic Development Agency
Translational medicine – what is that, exactly? As the name suggests, it’s a translation process. More specifically, it’s the process that enables the findings from medical research and industrial development to transition from bench to bedside as quickly as possible in the form of a marketable product, drug or treatment. It involves various players from research, the hospital and industry. These players now have a national competence center – sitem-insel AG – at their disposal, based on three pillars: education and training, state-of-the-art infrastructure, and assistance with obtaining authorization for medical devices.

All players united under one roof
“The industrial sector is important to us,” says sitem-insel AG CEO Simon Rothen. “So a public-private partnership was the obvious way to go, as it enabled all partners in research, the hospital, industry and the administration to come on board.” The extent of interest in sitem-insel is clearly illustrated by the speed at which private companies such as CSL Behring, Siemens, the Diabetes Center Berne, specialized start-ups, the industry association Swiss Medtech, but also research institutes such as EMPA and ARTORG, moved into the building. The University of Bern and Inselspital operate several major platforms there, enabling research to be conducted in a wide range of areas for the benefit of patients. “The fact that well-known companies and leading research institutes are on board sends a strong signal and is outstanding publicity for sitem-insel,” Rothen explains with considerable satisfaction. Indeed, apart from a few free spaces reserved for projects with external players, the sitem-insel site is already fully occupied.

“The spacious communication zones at sitem-insel are a key part of interdisciplinary collaboration.”
Simon Rothen, CEO, sitem-insel AG
Difficult path from invention to product
Switzerland ranks among the countries with the highest number of patents applied for per capita. However, its record on implementing these inventions is relatively modest. This is often due to a lack of coordination in the translation process. And that also applies to the relatively new discipline of translational medicine, which aims to transition promising findings from research laboratories into clinical application. Bridging the gap between the laboratory and clinical practice calls for a high level of multidisciplinary cooperation. But in the past there were no study programs covering this specific aspect.

Removing obstacles
How does sitem-insel AG implement translational medicine? CEO Simon Rothen explains. “We intentionally avoided specializing from day one; instead, we first asked ourselves where the obstacles were in the translation process. And we discovered that even though the researchers and clinicians excel in their own fields, they welcome support in the complex process of obtaining authorization for their products. To cut a long story short, when a research idea is translated into a product, the researcher becomes an entrepreneur.”

sitem-insel School: study programs in translational medicine
sitem-insel School – which provides continuing education in translational medicine and biomedical entrepreneurship – specifically prepares its graduates for an entrepreneurial role in order to equip them with the skills they need to successfully coordinate the development and marketing of biomedical products. This program is offered by the University of Bern and can be rounded off with a Master of Advanced Studies.

“sitem-insel AG is a research institute of great national importance.”
Swiss Confederation

Translation process
How to get a research idea quickly from bench to bedside.

sitem-insel AG partners educational institutions, infrastructure, platforms, services and networks throughout the entire translation process.

Internal platforms
sitem-insel
- Clinical Anatomy Training and Research
- Enabling Facilities
- Promoting Services
- School

University of Bern
- anresis-IFIK
- ARTORG Center
- Biosafety Laboratory – IFIK
- DRC Dental Research Center – ZMK Bern

Insel Group
- Cardiovascular Innovation & Test Center
- Clinical Trials Unit Bern
- hearing & balance
- Metabolomics Unit
- NeuroTec
- Translational Imaging Center
- Translational Musculoskeletal Research Cluster
sitem-insel Enabling Facilities:
state-of-the-art infrastructure
“Research is becoming increasingly interdisciplinary, and the left hand often doesn’t know what the right hand is doing. We want to break through this barrier. With our Enabling Facilities, we provide state-of-the-art infrastructure that is transparent and encourages collaboration,” Simon Rothen explains.

At sitem-insel, researchers have access to the world’s most powerful MRI scanner, Magnetom Terra (7 Tesla) with clinical approval. There are only a handful of these worldwide, one of which is at sitem-insel.

sitem-insel Promoting Services:
information on regulatory requirements
In the final stage in the translation process, the emphasis is on obtaining authorization for the newly developed products. Unlike drugs, medical devices do not undergo regulatory approval. For these products, Switzerland has adopted the European Union’s conformity assessment system on the basis of bilateral agreements, with private bodies responsible for assessing conformity with the relevant international standards. The visible result of a conformity assessment is the CE mark, which allows medical devices to be placed on the market within the EU and also in Switzerland.

“Regulatory requirements are changing all the time. It’s difficult for researchers to keep track of them all. sitem-insel Promoting Services, which has its own professorship, provides information on current licensing regulations. We pass this information on in workshops, at symposia and also via the school,” Simon Rothen says.

Private companies
- CSL Biologics Research Center
- Diabetes Center Berne
- Restaurant Lilly Jo
- Swiss Medtech

Small companies
- AlveolIX
- Biosicherheitszentrum
- Campus Stiftung Lindenhof Bern
- CorFlow Therapeutics AG
- Decomplix AG
- Empa Materials Science and Technology
- HGF GmbH
- Nodus Education
- RetinAI Medical AG
- SMTP Technology Switzerland AG
- SMEs
- Start-ups
- Hospitals
- Regulators
Clinic and industry right next door

The researcher’s perspective

The ARTORG Center for Biomedical Engineering Research is a center of excellence within the University of Bern’s medical faculty. Five of its eleven research teams are based at sitem-insel.

How important is translational medicine to you?

“Besides basic research, we are actively involved in the translation process to ensure that patients benefit from our innovations directly. So it is vital that we work closely with the hospital, to ensure our medical technology solutions can withstand everyday clinical use, but also with industry, as they need to be brought to market as a product. And with sitem-insel right next door, we are perfectly placed to do this.”

What does sitem-insel offer you?

“Our teams of engineers, computer scientists, materials scientists, bioscientists and clinical specialists benefit from the synergies at sitem-insel. Its bright, open-plan layout is ideal – it enables us to share ideas with other tenants who are pursuing similar research interests or projects. Plus the building is flexible enough for us to set up laboratories with complex equipment as well as our precision workshop and offices.”

What opportunities does sitem-insel School offer you?

“We attach great importance to training outstanding biomedical engineers. We offer them world-class master’s and doctoral programs. Because they promote entrepreneurial skills, the courses at sitem-insel School are an important and perfect adjunct to our biomedical engineering master’s degree program.”

What do the sitem-insel Promoting Services offer you?

“It’s good to have partners who know the regulatory framework inside out at any given time. This is a decisive advantage, especially for the product development work being done by our start-ups RetinAI and AlveoliX, who are also based at sitem-insel.

Delivering fast, safe, high-quality care to the patient

The doctor’s perspective

As a university hospital, Inselspital is very heavily involved in teaching and research. A major area of concern in the clinical research carried out there is patient safety. For this reason, drugs, therapies, and medical devices are rigorously tested in the development stage and in clinical practice.

What benefits do you expect from sitem-insel?

“We want the new processes and devices developed at sitem-insel to help patients to better integrate their diagnoses and treatments into their everyday lives. This will enable better health status data to be collected, leading to faster recovery and a better quality of life.”

Can smaller hospitals also benefit from sitem-insel?

“The new, standardized, user-friendly processes developed at sitem-insel will enable diagnostics and therapies for diseases requiring a less highly specialized approach to be shifted from the center to the periphery. This will benefit smaller hospitals directly. If this frees up more capacity for complex cases in the center in the medium term, that in turn will benefit cooperation partners and referring physicians.”

How do you rate the sitem-insel School’s training program?

“This will definitely help fill a crucial gap in present-day medical degree courses by providing practical, regulatory and business expertise.”

“Sitem-insel gets neurology from bench to bedside.”

Professor Kaspar Schindler, Department of Neurology at Inselspital Bern
The aim of the Diabetes Center Berne (DCB) is to improve the diagnosis and treatment of people with diabetes. In its 1,000 square meters of space at sitem-insel the Center supports projects initiated by researchers and enterprises that address unresolved issues, with the emphasis on supporting the application of newly acquired knowledge in clinical practice – known as “translation”.

What is it about translational research that appeals to you as an entrepreneur?
“In our opinion, many research findings and entrepreneurs’ ideas fail because of the challenges of translation, so the patient ends up missing out. Translational research in the sense of clinical testing of findings and ideas ultimately leads to new, innovative solutions for people with diabetes.”

Medicine is one of the great strengths of Bern as an industrial hub. With Insel, Switzerland’s largest university hospital, pioneering academic research, and 280 medical technology companies, the Canton of Bern is perfectly equipped to achieve an ambitious objective: profiling Bern as Switzerland’s leading medical hub with international appeal. To do so, the government is promoting ever closer collaboration between research and industry. After all, the synergies generated by academic research, the hospital and medtech companies are crucial to the success of Bern as a medical hub. The sitem-insel translational medicine center is exemplary in this respect: it is a flagship institution that is unique in its form, orientation and proximity to the hospital.

“We build bridges, generate new knowledge, and develop and launch real solutions for people with diabetes.”
Lukas Frösch, Managing Director, Diabetes Center Berne

An attractive location for visionary research projects
The entrepreneur’s perspective

You are based directly in the sitem-insel AG building. How does this benefit you?
“We have the ideal infrastructure for translational projects here, such as for a Swiss National Science Foundation project at the University Department for Diabetology (UDEM), which is investigating the effects of low blood sugar on driving. Our proximity to the Insel Campus and to our clinical partner, UDEM, is also ideal. Within sitem-insel, we expect great things from the ongoing interdisciplinary cooperation with other platforms.”

What is it about translational research that appeals to you as an entrepreneur?
“In our opinion, many research findings and entrepreneurs’ ideas fail because of the challenges of translation, so the patient ends up missing out. Translational research in the sense of clinical testing of findings and ideas ultimately leads to new, innovative solutions for people with diabetes.”

When industry and Canton pull together
The politician’s perspective

“How do projects come about at the Diabetes Center Berne?
“At the moment, projects have to be applied for and they have to meet certain criteria. A central criterion is that there must be cooperation with the Diabetes Center Berne on the content. One such project was a preclinical study we conducted jointly with a Swiss start-up, which involved identifying and estimating the nutritional components in foods. We also provide support in the implementation of clinical studies to achieve the registrations required for market launch. Going forward, we expect that the four newly created professorships at the DCB will result in some visionary projects.”

“Medicine is one of the great strengths of Bern as an industrial hub. With Insel, Switzerland’s largest university hospital, pioneering academic research, and 280 medical technology companies, the Canton of Bern is perfectly equipped to achieve an ambitious objective: profiling Bern as Switzerland’s leading medical hub with international appeal.

To do so, the government is promoting ever closer collaboration between research and industry. After all, the synergies generated by academic research, the hospital and medtech companies are crucial to the success of Bern as a medical hub. The sitem-insel translational medicine center is exemplary in this respect: it is a flagship institution that is unique in its form, orientation and proximity to the hospital.

To further boost Bern’s strengths in the medical field, what is needed is a long-term strategy, a willingness to invest, perseverance and close cooperation between all partners. Developing the Insel Campus is a key element of this strategy. The Insel Group is investing more than CHF 1 billion in this project by 2025, and the Canton of Bern is contributing CHF 1.15 billion by 2034 to expand the medical faculty.

Industry is also on board, as the sitem-insel example shows, with 90 percent of the Campus already occupied today. Willy Michel’s privately financed diabetes research center, the commitments of CSL Behring and Straumann AG, and the many start-ups that are setting up here are prime examples of the interest industry is taking in this exceptional innovation platform.”

“Sitem-insel is a flagship institution that is unique in its form, orientation and proximity to the hospital.”
Christoph Ammann, President of the government of the Canton of Bern, Minister of Economic Affairs
Certus Diagnostics provides reliable rapid tests for the on-site detection of microorganisms. To meet the increasing demand for quick and dependable results for the diagnosis of infectious diseases, the company has developed a novel molecular biology detection method which is so simple that it can even be used by lay people. Backed up by its extensive experience in microbiology diagnostic laboratories, its test kits meet customers’ needs and set new standards.

certus molecular diagnostics ag was founded in March 2017 by Samuel Zürcher (physician) and Alexander Lüthi (doctor of biology). Besides winning several entrepreneurial awards and competitions, the young company has already launched its first products for the detection of bacterial contamination in cell cultures.

Number of employees: 5
Zollikofen
Year founded: 2017
www.certusdiagnostics.com
Novalytica

Novalytica specializes in collecting, processing and structuring data. The data it collects and prepares come from regional and national statistics, online platforms or cantonal official journals. Preparing these data is a time-consuming and costly business for companies; the services provided by these data specialists provide players in the real estate, finance, marketing and public administration sectors with valuable support.

Novalytica can generate specific regional developments and analyses. An example from the real estate sector: How well developed is a residential area? Does it have a kindergarten or shopping facilities nearby? How many hours of sunshine and what level of noise emissions does a location have, or how high are average rents in the surrounding area? Factors such as these are important for effective real estate management. But how does one get hold of these data? Novalytica offers the ideal solution. Its flexible data tools also compare in-house data with market data, quickly giving portfolio managers an overview of the current market.

ReseaTech

Simon Zumbrunnen and Philipp Haslebacher, two graduates of Bern University of Applied Sciences (BFH), founded the high-tech start-up ReseaTech in May 2015. The young Burgdorf-based company manufactures fluid measuring systems in the microliter range, which are particularly sought after by manufacturers in the biotechnology and medical technology sectors.

Zumbrunnen and Haslebacher continued their research at the BFH Institute for Printing Technology both during their studies and after they graduated. The project, which was co-financed by the Swiss Federal Commission for Technology and Innovation, went on to win the Ypsomed Innovation Prize and the Burgdorf Inno Award and has also received financial support from the Venture Kick start-up funding program and the Inventus Bern Foundation.

ReseaTech concluded a successful financing round with private investors in May 2019. Zumbrunnen comments proudly: “This step is an important milestone in the development of our sensor company in Burgdorf.”

Touchless Automation

Touchless Automation co-founder Fabio Depetris knows how to handle demanding materials. He spent many years working in the Swiss watch industry, where minuscule components and highly sensitive materials are processed. This led him to the realization that what was needed were tools that would neither touch nor alter these materials. So the Touchless Automation team took up the gauntlet of researching and manufacturing fully automatic machines that move the smallest components without actually touching them. The processes are controlled by air jets and vibrations.

Based on this technology, Touchless Automation developed its own line of contactless industrial machines. This young company’s technologies are mainly used in light generation and transmission (optoelectronics), MEMS*, micro-optics and surface perfection.

Touchless Automation is already in negotiations with three international companies and is planning to attend trade fairs in China, Germany and the USA in the coming months.

* MEMS are microelectromechanical systems that are micrometers (millions of a millimeter) in size. They can be found in applications as wide-ranging as mobile phones, cardiac pacemakers, car tires and office printers.
The stuff dreams are made of

The Loeb story began with Nicole Loeb’s ancestors, who travelled across Switzerland as itinerant salesmen. Originally from Alsace, the Loeb Brothers liked Bern so much that they soon settled here and built up a small empire of department stores.

Strong woman in the background

Unlike her father François, the prudent Nicole Loeb (52) prefers to operate in the background. “My father had a strong presence, both as a dad and a CEO. He was very much hands-on and was omnipresent in the store: at the checkout, providing advice or in his dealings with customers and staff. That suited him – he thrived on interpersonal relationships with a down-to-earth approach. I tend to be more reserved by nature. My management style is personal and also staff-focused, but I prefer to work in the background, securing the strategic orientation and long-term survival of our family business. Times are tough, but they are also stirring up old patterns and replacing outdated business models,” Nicole Loeb reveals.

A world of inspiration

Nicole Loeb, who lives in Bern, has always been curious about what the world has to offer. Born in Canada, where her father worked for various companies, she had her first taste of living abroad at an early age, returning to Switzerland with her family at the tender age of six months. She studied decorative arts at school and later qualified as a business economist specializing in textiles. As a young woman, Loeb was always on the go. She lived in New York for two years – a metropolis that still holds lots of fond memories for her: “New York has so much to offer. I love going back there. I get inspiration for our store there and in other cities. I am always impressed at how department stores in big cities manage to reinvent themselves to stay in business.”
At the age of 30 Loeb also had a brief stopover in Düsseldorf, where she gained valuable experience in business administration and management as head of department in a large textile company. After that, she slipped into the world of Loeb quite by chance, she says. “I took over as manager of textiles in our company in 1999. And it gradually became clear that we would have to change tack. But I didn’t realize at the time that it would be me setting the course. At some point the decision was made, and in 2005 I took over as CEO of Loeb Holding AG and put together a great management team to tackle our new corporate goals together.”

One of these goals was a major renovation of the Bern department store in 2019, which was completed in September. The family business now focuses on customer experience and has installed a sewing café, a show kitchen and bars to invite shoppers to linger. “You have to listen carefully,” the mother of two explains. “What do customers want? What can we offer them that they can’t order online? That’s where you have to start. Social interaction, a feel-good ambience and a variety of needs being met in the same place. A virtual world can’t offer you that!”

Nicole Loeb – the fifth generation and the first female director, has shaken up the family business. This transformation also manifests itself in new business models, a new alignment and an unconventional leadership style.

Stopover in Düsseldorf

Customer experience and feel-good oasis

One of these goals was a major renovation of the Bern department store in 2019, which was completed in September. The family business now focuses on customer experience and has installed a sewing café, a show kitchen and bars to invite shoppers to linger. “You have to listen carefully,” the mother of two explains. “What do customers want? What can we offer them that they can’t order online? That’s where you have to start. Social interaction, a feel-good ambience and a variety of needs being met in the same place. A virtual world can’t offer you that!”

Something had to give

For Nicole Loeb, one thing was always clear: she would never have taken on a senior management role if she couldn’t work around having a family. “What kind of a role model would I have been for my daughters and young women in general if we hadn’t had a part-time option?” she asks. “In Scandinavia it’s quite normal for fathers and mothers in management positions to be able to work part-time. Here in Switzerland we’re still lagging way behind in this respect.” And how does she make time for herself? “Something has to give, that’s for certain. I don’t want to miss a single minute of the pleasure my daughters give me,” she says. As her daughters get older, Loeb is looking forward to having more free time to spend on other things: cycling, visiting art exhibitions, reading a book or practicing yoga are right at the top of her to-do list.
Edgar Schönübächler, CEO und ETH-trained micro-technology engineer, is part of Bien-Air Dental SA’s recipe for success: “We produce all strategically important components at our headquarters in Biel/ Bienne and source the rest from suppliers. We can find everything we need within a 50 km radius: the microtechnological expertise and the specialists who are actually able to produce the kinds of compo- nents we need. We would struggle to find those abroad.” Bien-Air manufactures micromotors complete with motor controllers, handpieces and contra- angles, turbines as well as instruments for surgery and implantology.

Leading the way with electric motors
Bien-Air first introduced electronic micromotors into dental surgeries back in the 1970s, and they went on to become not just flagship products but best sellers too. “Our micromotors are what drives the contra- angles. The special feature of these motors is that they have very precise speed control and high level reliability, allowing dentists to work more efficiently and making the experience more pleasant for the patient,” says Schönübächler. These motors have opened up markets in the USA for the Biel/Bienne-based precision engineering company: “We were able to kit out 500 dentists’ chairs at the prestigious University of Maryland in Baltimore with them in one fell swoop. That’s a fantastic reference for us. As many as 40 out of a total of 64 American dental insti- tutes are now equipped with our motors.” Bien-Air’s electric motor, including the motor controller soft- ware and the electronics, has propelled it to the global no. 1 position, both technologically and in vol- ume terms.

New branch in Brazil
Ninety-eight percent of Bien-Air’s products are exported. That’s not surprising when you look at the numbers: there are only 4,800 dentists in Switzerland, whereas there are around 350,000 licensed dentists in the EU. Its biggest market is the USA, fol- lowed by France. Bien-Air is now looking to develop the Latin American market, starting in Brazil. Schön- büächler: “We will be opening a branch there in 2020 with the support of the Bern Economic Development Agency. Bien-Air products are in daily use all over the world today. We market ourselves through our prod- ucts, not on price.”

What does the Canton of Bern offer a medtech company?
Biel/Bienne-based Bien-Air is full of praise for its location. Taxes are not the most important issue: much more important, it believes, is the fact that the administration and politicians take an interest in companies such as Bien-Air. “Both the cantonal authorities and those in Biel/Bienne are easily acces- sible, and we can discuss our concerns with them,” Schönübächler explains. With regard to sitem-insel AG, the translational center of excellence, he is opti- mistic: “I have already been in contact with sitem- insel. There are two aspects that are interesting for us in the medium term: training and regulatory. These are of very direct concern to us. It is incredibly difficult to find experts in this area; in fact we’re wondering whether we shouldn’t be training people at sitem- insel ourselves.”

On a side note, Bien-Air hived off its microsurgery arm into the spin-off Bien-Air Surgery SA in 2001 and now calls itself Bien-Air Dental SA. The spin-off has gone from strength to strength and is building a new sales, development and administration building accommodating 40–50 people right next door to the Biel/Bienne headquarters. The staff of both compa- nies will be able to benefit from a newly created camp- pus there.

Digitalization turns vision into system
There is a strong trend towards dental practice chains nowadays. About 15 percent of dentists are organized this way, and the trend is rising. These mergers increase the demand for end-to-end digital- ized workflows. “Our vision is to become an indis- pensable partner to dentists. These days it is no longer enough to simply sell individual products. We need to offer systems that meet the needs of the modern digitalized dental practice,” says Schön- büächler, thinking of the future. Back in 2012, Bien-Air was already supplying dentists with the iPad-based iChiropro, a digital system that allows them to plan and manage all aspects of their work processes. The company’s comprehensive customer service is also digitalized and available internationally.

“We market ourselves through our products, not on price.”

Edgar Schönübächler, CEO Bien-Air Dental SA
Bien-Air Dental SA

Bien-Air Dental SA is an independent family business that embodies and has mastered the values of the watchmaking culture, such as precision and quality. Its 500 employees and 6 apprentices in a wide range of fields cover all the areas of expertise it needs for the medical devices it develops, produces and sells under its own brand name.

1959
Bien-Air founded, Gyro turbine developed

1970
World’s first electric micromotors for contra-angles developed

2001
Bien-Air Surgery spun off

2012 – 2014
iChiropro, the world’s first iPad-based medical device

2019
Tornado X – 60 years of know-how and passion.

9 branches for sales and service
3 local sales offices
90 export countries, 120 service centers
Headquarters

BIEN-AIR DENTAL SA

Developed in-house, Bien-Air’s electric micromotors for contra-angles are the highlight of its product portfolio.
Quality and efficiency given boost by digitalization

With digitalization and full networking across the entire value chain, industrial production is taking on a new dimension. This is helping high-wage regions remain globally competitive. Companies operating in the Canton of Bern such as Georg Fischer, Bystronic, Balluff, Wander and Ypsomed are leading the way: digitalization is key.

Industrial concern Georg Fischer (GF) has just inaugurated a new innovation and production center in Biel/Bienne, making a clear statement of commitment to the location. The aim was to digitalize the entire value chain – not only its own production facilities but also its logistics and collaboration with partners, boosting efficiency and quality and optimizing the material flow, as Andreas Rauch, Head of Digital Business at GF Machining Solutions in Biel/Bienne, explains.

Ongoing quality control
Automation of production processes, in which machines, systems, robots and sensors are inter-connected, goes back a long way. But digitalization has since scaled new heights in quality. Increasingly, the focus is on issues such as optimizing logistics, controlling and monitoring production facilities (availability, breakdowns) at short intervals or even in real time, along with ongoing quality control and flexible fulfillment of customer requirements (see graphic).

“What’s the reason why I need to connect to an Enterprise Resource Planning (ERP) system these days,” explains Fabian Furrer, Bystronic’s Head of Production at Niederöz. Rauch feels the same: “Everything is networked with IT. It’s not just processes that are digitalized, but logistics too – incoming and outgoing goods. We are networked with our suppliers and collaborate digitally with our customers.” This ultimately results in traceability, enabling raw materials and workpieces to be continually traced throughout the entire production process right up to the finished product the customer receives. This applies to both the systems GF and Bystronic supply to their customers and those they use themselves.

Huge volumes of data
Digitalization involves the collection and analysis of huge volumes of data. Of course, this should not be the end in itself. “Industry should not be guided by technology but rather by its own business model, by clear objectives and problems,” explains Dominic Gorecky, Head of Research at the Swiss Smart Factory, which is based at the Switzerland Innovation Park Biel/Bienne. Not every company needs all the data in real time, and whether connections are wired or wireless depends on the individual situation.

What the companies we spoke to have achieved is impressive:
• Gains in efficiency and production rates, higher output (with the same number of staff)
• Optimized goods flows, lower storage costs
• Better monitoring of plant and processes: fewer breakdowns, improved quality
• Greater flexibility leading to better fulfillment of customer wishes
• Faster customer support (e.g. preventative troubleshooting, maintenance)

In a nutshell, digitalization has enabled these companies to decisively boost their international competitive position.

“Industry should not be guided by technology but rather by its own business model.”
Dominic Gorecky, Head of Research at the Swiss Smart Factory
Balluff and Swiss Smart Factory: miniature sensors and IO-Link Wireless
The German Balluff Group operates a competence center for miniature sensor technology in Bellmund. In collaboration with the Swiss Smart Factory and the HFTM Mittelland Technical Secondary School in Biel/Bienne, Balluff has integrated small sensors wirelessly in a demonstration system. A robot carries workpieces from one workstation to another and simultaneously inspects the parts on an ongoing basis. It is controlled using IO-Link Wireless, the latest industrial wireless communication standard, which can transmit large volumes of data securely and in real time.

Ypsomed and GF embrace 5G
Burgdorf-based medical technology company Ypsomed has successfully completed a pilot project with 5G mobile communication technology in collaboration with Swisscom. The aim was to track the flow of goods through the entire production process, evaluate machine data in real time and optimize quality assurance. The companies are currently identifying which applications will ultimately be incorporated into the production processes. The decision to use 5G has already been taken.

GF is also planning to unveil its first 5G projects, which will be progressed in collaboration with the German Fraunhofer Institute and a leading telecoms provider. GF is embracing 5G because data analysis and process control are central to the smart machining of the future. 5G will also enable real-time wireless networks to be mapped.

Bystronic and its software solutions
Bystronic is one of the world’s leading suppliers of high-quality solutions for sheet metal processing, and specializes in developing fully networked and automated systems. In addition to machines (laser cutting systems and pressbrakes), its portfolio also includes extensive automation systems (for material flows, storage, machine setup, etc.) and software solutions (planning and process control, monitoring and support). Bystronic uses all these solutions in its own production facility at its headquarters in Niederönz as well.

Wander: state-of-the-art with Ethernet and Wi-Fi
In 2016, food manufacturer Wander put a new production plant for its Ovomaltine Crunchy Cream bread spread into operation in Neuenegg and repatriated production from Belgium. The entire production chain is digitalized. Eighty percent of orders are placed electronically, and process planning is managed using a comprehensive database, enabling them to optimize stocks, seasonal demand and customer requirements. The recipes for the 650 different products are stored in the database in the ERP system.
New holiday resort puts Meiringen firmly on the tourist map

BLENDING IN WELL
Meiringen is expanding its accommodation offering with new, modern 2- to 4-room apartments. One planning condition for the Swisspeak Resorts was that it should integrate well into the village landscape.
The new Swisspeak Resorts Meiringen is much more than just a holiday apartment complex. The whole of Haslital has grasped the opportunities for further regional development that large-scale projects of this kind offer. berncapitalarea editor Marianne Dafflon has been asking around.

“Are we going to see the dwarfs again soon?” asks the boy in the local train. “Another time; today we’re taking Melanie up to the Planplatten mountaintop station. We’ve given her a tandem flight for her birthday,” says his mother, while the father checks the departure times of the mountain railway on his mobile phone. “We’ll be fine,” he says. “Oh, and take a look at this ad: they’ve built some new holiday apartments there. They look really modern and functional.”

Meiringen station is the last stop on the line. I alight from the train and after just a few steps I’m standing outside the selfsame resort – the wooden buildings of Swisspeak Resorts Meiringen, which opened at the end of 2019. It’s a lovely spot right in the middle of the village and blends in so well, as if there had always been buildings here. Even Casinoplatz has been given a face lift, with no trace of anything that keeps tourist and villager apart. Willkommenskultur in architecture – it’s piquing my curiosity. What’s the story behind this resort, and what do the locals think of it? Meiringen has long been my insider tip: lots of family businesses and a bustling yet welcoming high street. Not a place built around tourism but a municipality with 5,000 inhabitants who love welcoming tourists. Nestling in the picture postcard idyll that is Haslital with its countless wonderful hiking and cycle trails, ski slopes, climbs and family activities.

Hot on the trail
I set off to search for clues to this resort. After all, Sherlock Holmes once came here to track down his nemesis, and there’s even a museum dedicated to him which recently got a make-over with a range of new activities.

Just 150 m further on I encounter a butcher’s shop run by Christian Nussbaum, family man and local resident. What does he think of the resort? He’s looking forward to seeing more customers in his shop, in the restaurants and on the mountain railways. “It will enable us to invest and keep the family businesses going that give this village its distinctive character.”

Markus Wiedemeier, president Oberhasli Association of SMEs

“In Meiringen, we retailers offer everything you need on a day-to-day basis – from pork chops to sunglasses – within just a few minutes’ walk.”

Christian Nussbaum, local butcher

“The holiday village gives us the opportunity to examine our own business and implement changes now. We will be optimizing our operations and expanding our rental fleet to make it more attractive to visitors.”

Markus Wiedemeier, president Oberhasli Association of SMEs
president of the Oberhasli Association of Small and Medium-sized Enterprises and sees the increase in the number of managed holiday apartment rentals as a godsend for the whole region. Local businesses are hoping for greater added value, of course, but they are also keen to deepen and expand their offerings as necessary. The many small businesses are service-focused and can adapt their offerings relatively quickly.

The authorities’ helping hand

I’m fascinated by the effort that Meiringen clearly puts into welcoming its visitors. Is it really like that? Or as Sherlock Holmes would say, “Never trust to general impressions, my boy, but concentrate yourself upon details.” I want to hear these details from Mayor Roland Frutiger. He was involved in the ski school for over 30 years and has particularly fond memories of the many young visitors stepping onto skis for the first time in Haslital. Meeting tourists’ needs has always been a way of life in Haslital. Many people appreciate the fact that you still come across locals in Meiringen – it’s the kind of authentic mountain village they are looking for that can be hard to find these days. “Come along to the “désalpe” [the return of the cattle from mountain pastures after the summer] some time – you’ll get a real feel for the pride and care with which people go about their work here. We want to retain this quality without standing still.” As mayor he is keen to see Meiringen develop in a way that enables the local population and the more than 70 businesses here to earn a living and enjoy a good quality of life. So why a holiday resort, I ask him? It all started with a large plot of municipal land that was earmarked for tourism infrastructure. The location, size and spirit of Meiringen was ideal for the Swisspeak Resorts project. Naturally, some locals were concerned about selling off the land and the extra competition and tourist offerings. These concerns were taken seriously by both sides.

Planning played an important role: they didn’t want a village within a village but an area that would be accessible to all. What’s more, the nearby listed Parkhotel du Sauvage shouldn’t end up looking shoehorned in between the village and the resort. The project also prompted the municipality to revamp Casinoplatz as well, with plans to bring it to life with events. Perhaps the resort’s importance lies in the

“Quality and a mix of sectors are important for Meiringen’s future. The region can bring locals and visitors together and needs to be equally attractive to both.”

Roland Frutiger, mayor
The fact that it has kick-started a series of developments that are having a domino effect in Meiringen and the wider region. The mayor, who is fully committed, has lots more plans up his sleeve, including 30 km/h speed restrictions on roads, upgrading the high street and the station square and building a swimming pool complex. All this will benefit both locals and visitors to the village.

The missing elements
Does a resort of this kind fill a gap in the market in Meiringen, I wonder? I check this out with Bettina Marusik-Wüthrich of the Haslital Region location marketing organization. She too grew up here and moved back here recently with her young family. There is a good range of hotels and holiday apartments, she says. But you often find that locals don’t want to rent out their apartments any more. Also, visitors’ expectations are changing. They aren’t interested in apartments with old furniture and TVs any more: they are looking for comfort and want to be surprised and pampered. Part of that is providing a good choice of accommodations, mountain railways, public transport and suggestions for tourists. For those many young families and couples of all ages looking for modern accommodations with extra services that can be booked via an app, the resort definitely fills a gap in the market. To create a tangible, positive ambience in the village, a lot of time and money has been invested in putting on information events and bringing in a range of partners, Bettina says. They have also made active use of the Canton’s offerings: thanks to the new regional policy, they were able to apply for funding early on to set up a study and build a solid foundation for the project. “The Canton of Bern has created very favorable framework conditions and we found them very easy to work with,” Bettina Marusk says.

A study in motivation
Unsurprisingly, Simon Zobrist, CEO of Haslital Tourism, and Hanspeter Wenger, director of Bergbahnen Meiringen-Hasliberg, were also full of enthusiasm. The hoped-for increases in frequency are one thing, but they are also aware that visitors’ expectations are increasing and you have to stay on the ball all the time. That might mean new ski lockers, restaurant offerings tailored to the visitor, or additional summer services such as the Marble Run Hasliberg walking trail, which opened in spring 2019. A new group of

“The Swisspeak Resort has given the magic of the family-friendly Haslital holiday region an extra boost. The proverbial charm of Haslital, the spirit of Sherlock Holmes, the wide range of tourist offerings, the creativity with which local residents run their businesses, and an innovative holiday village – all these factors go to make up the perfect recipe for future dream holidays.”

Simon Zobrist, resort manager Haslital Tourismus

“The new regional policy gives us a sound basis for a thorough feasibility assessment of larger projects.”

Bettina Marusik-Wüthrich, location marketing

“Investing in visitor satisfaction is a must for us. The resort provides an upswing. If all the service providers come on board, Haslital will raise its profile.”

Hanspeter Wenger, chairman of the Board of Directors and the Management Board of Bergbahnen Meiringen-Hasliberg AG

“The resort’s project team was broad-based. Headed by the architects, the team included representatives of businesses, hotels, communal authorities and local residents, and the Canton. That guaranteed the high quality standard.”

Dr. Beat Benz, RESalpina GmbH, Breil/Brigels
visitors staying in a modern resort is an incentive. As regular visitors to the area already know, there is no shortage of nature here. This diverse Haslital region, boasting natural spectacles such as waterfalls, ravines, Alpine meadows and imposing rocks at every turn, has everything visitors could want for an unforgettable holiday experience.

The Builders’ Perspective

The circle is beginning to close; now all that’s missing in my overall picture is the resort itself. Roger Müller, country manager for Interhome Switzerland, the operator of the Swisspeak resorts, invites me to visit an apartment. But first I want to know what the people who built the resort thought of Meiringen.

“Our working relationship with the authorities and tourism stakeholders was excellent right from day one, as we’re all mountain people,” answers Philippe Lathion, president of the investment company. “The first feelers were put out to the landowners, the location marketing organization and the municipality back in March 2014,” says architect Georg Barandun. “The fact that they were so well disposed towards the idea of a holiday village encouraged us, as the project developers, to take the planning risk.”

Dr. Beat Benz of RESalpina GmbH adds: “Meiringen had an ideal plot of land which was already earmarked for a tourism project in the zoning plan. All the stakeholders worked extremely well together and with great focus right from the start.”

The apartment I’m shown round looks inviting, modern, bright and functional. I stand in front of the large floor-to-ceiling window in the kitchen and spot the family from the train on the street below. They are talking and pointing to the top floor. Maybe they are wondering, like I did as a typical day visitor, whether Meiringen might not be just the place for a real break. In any event – with apologies to Sherlock Holmes – it didn’t take much keenness of observation to establish that it ticks lots of boxes, and one can quite happily say that Meiringen is on the up. All that remains is for me to point out that the best thing to do is to come and find out for yourself. Or, as Holmes would say, are you just seeing or actually observing?

“Meiringen embodies the spirit of the mountain. A destination located at the heart of one of our most beautiful tourist regions that offers an exceptional playground in summer and winter alike.”

Philippe Lathion, investor, president Mountain Resort Real Estate Fund SICAV

FOR WINTER LOVERS

Meiringen nestles between the Brünig, Grosse Scheidegg, Susten and Grimsel passes and offers easy access to the Meiringen-Hasliberg ski resort. There’s something for everyone who loves winter.
The new resort in Meiringen
Opened in December 2019 with 79 rental holiday apartments in three residences and 426 beds, the resort took around two years to build and cost approximately CHF 30 million.

The heart of the resort is the main building with foyer, reception and bar, a multipurpose room and a Kids’ Club. All the residences are built with a masonry ground floor and wooden upper floors, blending with the local style.

They consist of bright, modern and well-appointed 2- to 4-room apartments, each boasting magnificent views of the mountains.

Check out the apartments here:
www.swisspeakresorts.com

Booking an apartment via the app gives you direct access to special tourist offers, rental services, local delivery services, etc.

Swisspeak Resorts
The Swisspeak Resorts project is funded by the investment company Mountain Resort Real Estate Fund SICAV and investor Philippe Lathion. SICAV is the first fund to focus its investment policy exclusively on the construction and ownership of tourist residences in the Swiss Alps. The investor’s philosophy is to put clients at center stage and enable them to share his passion for the Swiss mountains.

All the buildings are designed to fit in with the local vernacular architecture. The resorts are built using a lot of wood and stone, ensuring that they blend in with the local style, and are unfussy and functional. The plan is to build ten holiday residences in the Swiss Alpine region within ten years. The residences in Brigels, Vercorin, Meiringen and Zinal are already operational.

All the resorts are operated and managed by the Swiss holiday home provider Interhome. Interhome is part of the Hotelplan Group and has around 50,000 holiday residences and apartments in 31 countries in its portfolio.

The winner will be drawn by lots and notified in writing. Employees of the Office of Economic Affairs are excluded from entering the competition. The judges’ decision is final. There is no cash alternative to the prize.

You can enter the solution at www.berninvest.be.ch/chance by February 29, 2020.
Or send it by postcard to the Bern Economic Development Agency, BCA Competition, Münsterplatz 3a, Postfach, 3000 Bern 8, Switzerland.

Many congratulations to the winners of our competition in «berncapitalarea» 1/2019. 1st Prize: Bernhard Kohler, Gurnigelstrasse 38, 3110 Münsingen; 2nd Prize: Martin Frey, Schulhausweg 4, 3127 Mühlthurnen; 3rd Prize: Karin Wyssmann, Säistrasse 61, 3176 Neuenegg

Competition prizes:
1st prize:
7 nights in 2-room Aare-type apartment with balcony or terrace, 2–4 persons. Bookable from March 1 to December 31, 2020 (excluding July 4 to August 15, 2020)

2nd and 3rd prizes:
“Haslital” Swiss army knife
Feel free to ask the Office of Economic Affairs

The civil service is responsible for implementing decisions and requirements of the Bernese government, the cantonal parliament and the federal government. We are happy to answer questions on the implementation of these legal requirements. Markus Gäumann, representative of the Occupational Health and Safety Service, shares some answers to questions about commercial and industrial buildings.

**Question:** “We want to install a packaging line in the under-utilized warehouse at our factory. Is there anything we need to take into account before we start?”

**Answer:** Yes, there is. The relevant cantonal legislation stipulates that anyone wanting to build or convert an industrial facility must apply to the cantonal authorities for approval of the work they plan to carry out. The easiest way to do this is to submit an ordinary building application (ordentliches Baugebührverfahren) to the lead authority via the responsible municipality.

**Question:** “An engineering and design bureau would like to build a new building consisting of an open-plan office with 22 workspaces. It will cost less than CHF 1 million, and as a small municipality we would like to handle the building application ourselves. Can the Office of Economic Affairs send us a health and safety report directly?”

**Answer:** No, unfortunately we can’t. On 24 October 2018 (BSIG No. 7/725.1/9), the administrative office of the governors’ offices (Regierungsstatthalterämter) decided that in municipalities without full authority to issue building permits, it is the governors who are responsible for the building permit procedure when a technical report or a plan approval from the Office of Economic Affairs is required. As a result, we are not allowed to send you a technical report directly.

**Question:** “Do workspaces that are permanently occupied always have to have a view out of a window?”

**Answer:** Natural light should be available in rooms in which work is carried out. In addition, permanent workspaces must have a view out of a window. For psychological reasons, visual contact with the outside world and information about its current situation are important for workers’ well-being. A view out of a window enables workers to take brief, active time out, whether during the day, at twilight or at night.

**Question:** “An old factory site is being converted into an industrial park with businesses from a range of sectors. Does a technical report or planning approval have to be issued for all businesses and facilities listed in the guideline ‘Beurteilungs- und bewilligungspflichtige Betriebe und Anlagen’ (Businesses and facilities requiring assessment and approval)?”

**Answer:** Yes. And if a new business or facility moves into the industrial park at a later date, we recommend they submit a new building application (Baubewilligung). Any industrial business that moves into the industrial park will need to obtain planning approval (Plangenehmigung) and, subsequently, an operating license (Betriebsbewilligung), but they may not necessarily need to submit a building application.

The Occupational Health and Safety Service checks buildings and facilities subject to building permits against the legal requirements.

Information on commercial and industrial buildings:
www.be.ch/wirtschaft > Industrie/Gewerbe

“Besides planning approval, industrial businesses also require an operating license.”
NEW ARRIVALS in the Canton of Bern

The Bern Economic Development Agency helps innovative international companies with their decisions to relocate and settle in the Canton of Bern – like e-peas and SMTP Technology AG.

E-PEAS

The number of networked IoT devices is growing all the time. Consequently, demand for solutions that extend the battery life of these devices is also on the rise. This is exactly where e-peas’ applications come in. This Belgian company has been active in developing and marketing ultra-low-power semiconductors for the past 15 years.

E-PEAS’ products boost the energy harvested and drastically reduce the amount of energy used by the power consuming blocks. This allows manufacturers of industrial and wireless IoT devices to significantly extend the life of the batteries used and slashes the high replacement costs.

E-PEAS’ product catalog comprises photovoltaic, thermal, vibration and RF harvester interface PMICs, microcontrollers and sensor solutions.

As part of its international expansion, e-peas opened a branch in La Neuveville in the Canton of Bern in September 2019. The bilingual La Neuveville is a stronghold of the Swiss microelectronics industry and the ideal place for this innovative company, which will enrich local industry. The Bern Economic Development Agency is delighted to welcome the company to the Canton of Bern.

www.e-peas.com

SMTP Technology AG

Founded in 2011, SMTP Technology Co., Ltd. is a Chinese high-tech R&D company specializing in the development of ultrasound technology for medical devices.

With the products in its XD series, it has set new standards in the world of ultrasound surgical instruments. The instruments in this series are particularly safe because they only cut through hard tissue. Thus, there is no risk of damaging soft tissue such as blood vessels or the spinal cord. For this reason, they are most often used in delicate operations in areas such as the spinal column or the base of the skull.

In China, SMTP supplies more than 150 leading hospitals. It has also had a presence in the European market since 2018. In order to serve and expand its European customer base effectively, the company recently founded SMTP Technology Switzerland AG in Bern. According to SMTP, the location at the heart of Switzerland, at the center of Europe and in the immediate vicinity of the university hospital Inselhospit not only makes geographical sense: it also values the multilingualism in Bern and the understanding and support it receives here as a foreign company.

www.starrag.com/de-de/success-story/interview-smtp-technology-co-ltd/112)
A Christmas market with a difference
This year’s Bern Star Market (Sternenmarkt) will take place on the Kleine Schanze (the city’s ancient fortifications) for the second time. There will be around 60 chalets offering all kinds of magical Christmas delights.

With vendors changing weekly, there will be new products to discover every week, so the market is well worth visiting more than once.

There will be gift ideas, handmade jewelry, designer items, crafts, and artisan delicacies galore to choose from.

And visitors needn’t go hungry, there will be food stalls serving a wide range of mouthwatering savory and sweet foods from all over the world to satisfy any appetite.

Mini star market for kids, 11:00–20:00 daily
Christmas time is the highlight of the year for children. In the children’s village in the middle of the Bern star market, visitors of all ages will find everything that makes children’s eyes light up: a library, a children’s cinema, table football, a merry-go-round and much more besides.

The Kindervilla will be hosting lots of exciting pre-Christmas activities, from face painting to storytelling, and from plays to arts and crafts sessions. And Santa Claus will be dropping by, of course!

When the kids get hungry there will be child-friendly refreshments on offer, as well as a bar where parents can meet for a chat.

International sled dog racing at Lenk
February 8-9, 2020

The International sled dog racing event has become something of an institution at Lenk. Happy owners and their dogs compete against the backdrop of a stunning snow-covered landscape. Fans from far and wide come together for this spectacular event every February.

Where and when dogs were first used to pull sleds is unknown. But it is assumed that it was in northern Siberia, where the indigenous peoples can look back on a long tradition of winter journeys.

The dogs’ wild howling and barking before the race gets underway represents motivation, power and drive at their strongest. Sled dogs love to run in a team. The sled dog drivers, known as “mushers,” have trouble holding them back at the starting line. The order is given, the brakes are off and the teams speed past the crowd of spectators into the white winter landscape.
Three not-to-be-missed events in the canton of Bern

**Belle Epoque Week**
*January 19 – 26, 2020, Kandersteg*

In the last week of January, Kandersteg travels back in time, recreating the magic of the Belle Epoque in the snow! Visitors and locals alike wander through the snow-covered streets dressed stylishly in turn-of-the-century costumes. As well as a varied program of events, visitors can benefit from a choice of nostalgic packages at local hotels.

**forever young – Welcome to the long life**
*Until March 29, 2020, Berner Generationenhaus, Bern*

With a multimedia tour for visitors of all ages and a varied program of events, the Berner Generationenhaus is inviting people to join in the dialog on living a long life in an ageing society, comparing self-determination and solidarity, the opportunities offered by medical science and ethical limits, the wisdom of old age and the obsession with youth.

**Killjoys and Weaker Selves**
*An exhibition on inhibitions until July 19, 2020, Museum of Communication, Bern*

This temporary exhibition faces up to inhibitions and explores a phenomenon that subtly but lastingly influences our social interactions and our communication. Where do inhibitions come from and what are they good for? How can we overcome them? And when can we count on them? There will be plenty for both the inhibited and the uninhibited to look forward to.

---

**Other Christmas markets**

- **Brienz Christmas Market**, November 30 – December 1, 2019
- **Biel/Bienne Christmas Market**, December 5 – December 24, 2019
- **Winterzauber Interlaken**
  - December 14 – December 22, 2019
- **Saanen Christmas Market**
  - December 6 and December 21, 2019
- **Huttwil Christmas Market**
  - November 27 – December 1, 2019
- **Kambly Christmas Market**
  - in Trubschachen, November 29 – December 1, and December 6 – 8, 2019

**Other sled dog races**

- **International sled dog racing at Kandersteg**
  - Provisional dates February 15/16, 2020
Elegance is an attitude

Simon Baker

The Longines Master Collection