

FRIBOURG 
network
FREIBURG

THE BUSINESS MAGAZINE
OF THE CANTON OF FRIBOURG

2017

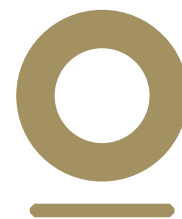
DIGITAL!

数字! NUMÉRIQUE!



CORE

Treuhand Cotting
Cotting Revision
Fiduciaire Revicor
Spörri MAS Treuhand



Wenn es um die Zukunft geht, zählt Erfahrung.

Mit Standorten in Düringen, Fribourg und Bern betreuen wir KMUs, Grossunternehmen, Privatkunden, öffentlich-rechtliche Verwaltungen sowie NPOs, Verbände, Vereine und Stiftungen in der deutsch- und französischsprachigen Schweiz.

Unsere rund 60 Mitarbeitenden sind bestens ausgebildet und verfügen über eine langjährige Erfahrung. Zusammen bieten wir Ihnen ein breites Spektrum an Dienstleistungen in den folgenden Branchen:

Treuhand

Wirtschaftsprüfung

Steuern

Unternehmensberatung

Öffentliche Verwaltung / NPO

Management / Outsourcing

Quand il s'agit d'avenir, l'expérience compte.

Dotés de sites à Guin, Fribourg et Berne, nous assurons un suivi pour les PME, les grandes entreprises, les particuliers, les administrations de droit public ou NPO, les associations, les fédérations et les fondations aussi bien en français qu'en allemand.

Nos quelques 60 collaboratrices et collaborateurs jouissent d'une excellente formation et bénéficient d'une expérience de longue date. Ensemble, nous proposons un large éventail de prestations dans les branches suivantes:

Fiduciaire

Révisions de comptes

Fiscalité

Conseils en gestion d'entreprise

Administration publique / NPO

Management / Outsourcing



Partner Partenaires

v.l.n.r. / d.g.à.d. Martin Gyger, Beat Mauron (Sitzleiter Düringen), Markus Jungo (verantwortlich für den Sitz Fribourg), Monika Hasler Kunz, Rinaldo Jendly, Christian Stritt (Sitzleiter Bern), Michael Münger, Klaus Jenelten

Düringen

Chännelmattstrasse 9
3186 Düringen
T +41 26 492 78 78

Fribourg

Route des Arsenaux 41
1705 Fribourg
T +41 26 347 28 80

Bern

Eigerstrasse 60
3007 Bern
T +41 31 329 20 20

www.core-partner.ch



Olivier Curty,
Minister of Economic Affairs

FRIBOURG HAS STARTED ITS DIGITAL REVOLUTION

The digital revolution is well underway. It is set to change forever not only how we produce, stock and sell goods and services, but also how we live and work. Sweeping digitization, artificial intelligence, the Internet of Things, robotization, big data, cloud computing, 3D printing and the sharing economy are already upon us, heralding a new era that will rapidly and radically transform our economy and society.

This year, Fribourg Network Freiburg (FNF) is given over to this fundamental issue and its impact on the canton. As in its previous editions on exports and the blue economy, FNF uncovers the many members of the Fribourg business community who have embraced this new reality and are even helping to drive this revolution. Some 40 companies and Schools based in the canton showcase their ingenious projects and ideas, and in doing so provide a fascinating snapshot of the tremendous innovation capacity of our entrepreneurs.

Likewise, the public authorities, especially the Cantonal Department for Economic Affairs and Employment, will continue their efforts to ensure that businesses have the best possible conditions that allow them to fully express their creativity and thus boost their competitiveness. It is therefore vital that we further stimulate research, reward innovation and facilitate the transfer of technologies. In this changing environment in which some professions will evolve or disappear while others will emerge to take their place, it is also important that we stay ahead in terms of the education that our canton can provide.

Finally, we need to give serious thought to this revolution so that we are able to anticipate its impact, which will go beyond technology to the very heart of society. The 2017 edition of FNF perfectly illustrates the capabilities and potential that Fribourg companies have to survive – and thrive – in this digital revolution. A promising future lies ahead!

“FRIBOURG, SWITZERLAND'S BEST KEPT SECRET”*

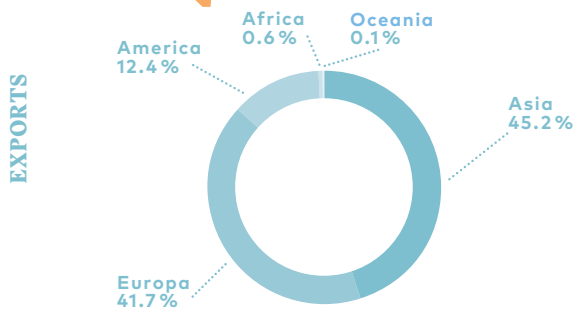
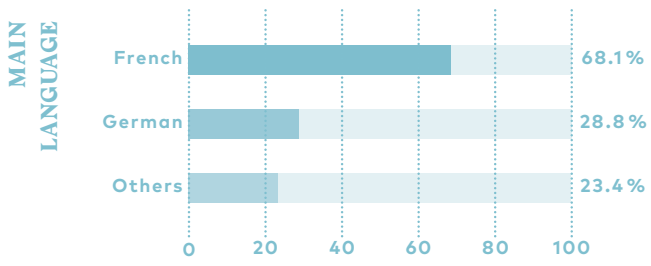
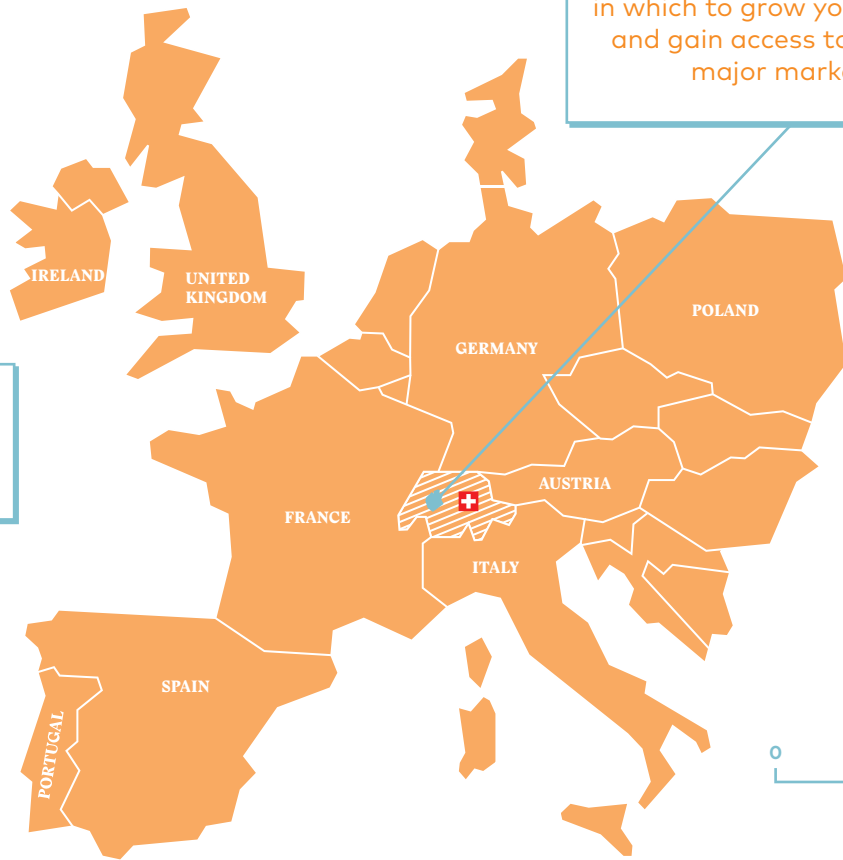
* Sheikha Lubna Al Qasimi, Government Minister, United Arab Emirates

Fribourg offers the perfect environment in which to grow your business and gain access to Europe’s major markets.

13.72 %
future income tax rate

1.5 million
Inhabitants within a 45-minute radius

22.8 %
are under 20, making it the youngest population in Switzerland



TECHNOLOGY PARKS

- BLUEFACTORY**
→ www.bluefactory.ch
- LE VIVIER**
→ www.vivier.ch
- MARLY INNOVATION CENTER**
→ www.marly-innovation-center.org

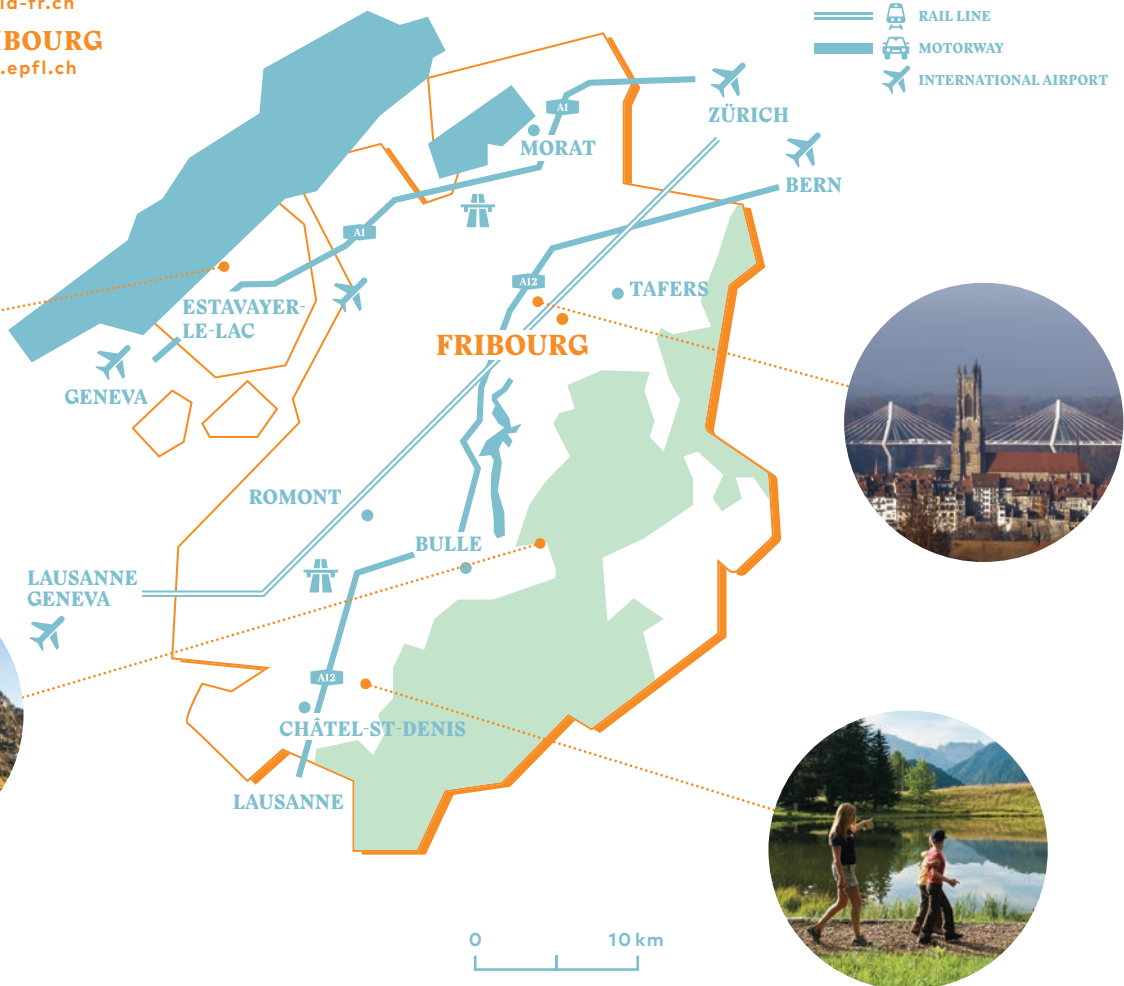


TECHNOLOGY PLATFORMS

- BIOFACTORY COMPETENCE CENTER**
→ www.bcc.ch
- SWISS INTEGRATIVE CENTER FOR HUMAN HEALTH**
→ www.sichh.ch
- SMART LIVING LAB**
→ www.smartlivinglab.ch
- INNOSQUARE**
→ www.innosquare.com
 - ▶ Swiss Plastics Cluster
 - ▶ Cluster Energie & Bâtiment
 - ▶ Cluster Food & Nutrition
 - ▶ Robust and Safe Systems Center (ROSAS)
 - ▶ Digital Printing Competence Center
 - ▶ Plastics Innovation Center

UNIVERSITY

- UNIVERSITY OF FRIBOURG**
→ www.unifr.ch
- ADOLPHE MERKLE INSTITUTE**
→ www.am-institute.ch
- SCHOOL OF MANAGEMENT**
→ www.heg-fr.ch
- SCHOOL OF ENGINEERING**
→ www.heia-fr.ch
- EPFL FRIBOURG**
→ fribourg.epfl.ch



“The Fribourg Development Agency is here to assist you!”

Jean-Luc Mossier
Director Fribourg Development Agency

TESTIMONIALS



→ www.promfr.ch

Internet of Things

Internet of Things refers to the connection of smart objects to the internet. Thermostats, alarm systems, smoke detectors, refrigerators and even toothbrushes are just a few of the billions of everyday objects that are now linked up to the digital world. Considered as the third stage in the Internet's evolution (Web 3.0), the Internet of Things is partly responsible for the exponential growth in the volume of information generated on the web, i.e. big data.

Artificial intelligence

Artificial intelligence seeks to equip machines with the ability to perform functions normally associated with those of the human mind. In machine learning, the system analyses big data sets to pinpoint the rules which generate new knowledge and thus enable machines to interpret new situations.

Big data

Big data refers to all of the digital data generated by the use of new technologies for both private and professional purposes. The processing and use of these colossal volumes of data are a real commercial and marketing challenge.

Cloud computing

Cloud computing uses remote servers to deliver IT services and applications online, thereby rendering them accessible anytime, anywhere and from any terminal. This constitutes a paradigm shift: instead of gaining additional computing power through the acquisition of material and software, consumers simply access providers' services via the internet.

Sharing economy

Sharing economy refers to new forms of consumption that let consumers share products, equipment and services, either free of charge or in return for payment. Perhaps the best-known examples of the online sharing economy are ride-sharing services (e.g.: BlaBlaCar) and vacation rental and homestay listings (e.g.: Airbnb). The incredible success of the start-up Uber has given rise to the term "uberization", which refers to the emergence of a new economic model that very quickly poses a threat to traditional models. In the case of Uber, it is the taxi industry that finds itself in this tricky situation.

Industry 4.0

Industry 4.0 is a term based on the idea that the world is on the precipice of a fourth industrial revolution that follows directly on from the invention of the steam engine (18th century), electricity (end of the 19th century) and information technology (20th century). This new revolution is based on smart factories consisting of interconnected machines and systems that communicate not only with the factory floor but also between each other and external players (customers, partners, other production facilities). The concept hails from Germany and came to the attention of the general public at the *Hannover Messe* in 2011.

Digital, Online, Smartphone, Internet of Things, Cloud Computing, Big Data, Artificial Intelligence, 3D Printing, Mobile Application, Data Analysis, Augmented Reality, Fablab, Smart Factory, .swiss, .ch, MOOC, Smart City, Cloud, ERP, Data Center, Social Media, Internet, Machine Learning, eHealth, Software, E-Learning, Open Source, SLL, Robotics, eBook, Academic Excellence, Fribourg-Freiburg, Innovation, International, Strategy, Switzerland, Technologies, blueFACTORY, Quality, Leadership, Research, R&D, Management, Education, University, Employment, Vocational Training, Master, Science, Students, Knowledge, Universities of Applied Sciences, Technology Parks, Success, Skills, Schools, Marly Innovation Center, Technology Transfer, Spin-off, Start-up,

Efficiency,
Multilingualism,
Competence
Centers, www,
Dynamism,
Investment,
Profitability,
Technology

Platform,
Adolphe
Merkle
Institute,

Young,
Le Vivier,

EPFL,
BCC,

SICHH,

IoT...

Fribourg / Switzerland: The Place to Shape the Future



ETAT DE FRIBOURG
STAAT FREIBURG
STATE OF FRIBOURG



Fribourg Development Agency FDA
Switzerland

—
Bd de Pérolles 25, P.O. Box 1350
CH – 1701 Fribourg
T +41 26 304 14 00
www.promfr.ch



JACQUES BOSCHUNG
**“EVERYTHING’S
IN PLACE”**

Jacques Boschung had an insider view of the largest merger-acquisition ever seen in the high-tech sector. Originally from Fribourg, Boschung is now Senior Vice President of EMEA (Europe, Middle East and Africa) Global Alliances and Telco at Dell EMC. The latter was created when the IT behemoth Dell bought the specialist data storage company EMC for 67 billion US dollars. With a global workforce of 150,000, the new corporation has an annual turnover of CHF 74 billion, giving it the second highest share of the worldwide digital market, just behind IBM (80 billions), and ahead of Hewlett Packard (51 billion), Cisco Systems (49 billion) and Lenovo (42 billion).



In this era of digital transformation, what does the future look like for a group such as Dell Technologies?

The market is changing, with many IT operations being transferred from private customers to cloud providers. Companies are outsourcing all their infrastructure to the cloud or using cloud applications to manage their customers. In this environment, Dell sees itself as the hardware and software outfitter of choice for corporate customers and cloud operators. We are therefore perfectly placed to win over segments of the digital market that have high growth potential.

Are we really witnessing a digital revolution?

Absolutely! The revolution currently under way knows no bounds. Since the first transistors (ed.: key components of electronic devices and logic circuits) were invented nearly 60 years ago, computing power has doubled every 18 months. This is the famous "Moore's Law", put forward in 1965 by engineer Gordon Moore, one of the Co-founders of Intel. However, we need to frame it in relation to what some refer to as the "second half of the chessboard".

Can you explain what you mean?

According to an Indian legend, the inventor of chess presented his game to the Sultan, who was mightily impressed and asked him what reward he would like. The inventor declared: one grain of rice on the first square of the chessboard, two on the second, four on the third and so on. By the time they reached the second half of the chessboard, the numbers were totally astronomical. In 2008, I claimed that we had now reached the second half of the chessboard. Moore's Law still applies, but the curve has become exponential. This revolution has come about because of the possibilities offered by this computing power and the storage capacity that is now available to us. The successive emergence of smartphones, social networks, big data and the cloud have completely transformed consumption practices and patterns.

What is trending now?

The Internet of Things is soaring. From Boeing 747 turbines to a ski jackets, over 200 billion objects will be connected by 2030. Industry and the economy as a whole are of course concerned by this connectivity. The sharing economy has yet to exploit its full potential. We will increasingly pay for services rather than objects. Personalization will reach dizzying heights. Certain business models will disappear. Take automobiles for example, the average usage rate of which is no more than 2%. The 2000 billion dollars that this industry is worth are seriously underutilized! Ultimately, our highways will teem with driverless cars that we will hire from companies like Uber according to terms that have yet to be defined.

What about artificial intelligence?

It seems like everyone is talking about it now! We shouldn't forget that artificial intelligence languages have been around since the 1970s but computers weren't powerful enough back then to leverage them. Today, the advances that have been made threaten certain jobs with high value added such as legal experts and doctors. AI is starting to touch on areas that until now were an exclusively human preserve.

Can we expect massive unemployment?

I can't really answer that. Change is coming and certain types of jobs will disappear while others – which we are still beyond our ken – will emerge. Thanks to the development of 3D printing, digitization brings with it the great hope, namely the return of industrial production to the West.

As a champion of innovation, has Switzerland more to lose or to gain from digitization?

It certainly has more to gain than other countries. Our flexible and efficient labor market is a major safeguard. We also benefit from an education system that is unique in the world, capable of adapting to the changing needs of the labor market. Everything's in place in Switzerland, and in the canton of Fribourg, to successfully ride this digital wave.

→ www.delltechnologies.com

düdingenplus



Nous louons et vendons à proximité immédiate de la gare de Guin

Location de 1'550 m² de surfaces commerciales et de bureaux

Location d'appartements, allant de 2½ à 4½ pièces

Vente d'appartements en PPE, allant de 3½ à 5½ pièces

Disponibilités dès avril 2018

L'ensemble des informations pour la location et la vente sous: www.hierwohnen.ch

Contact pour les locations

Madame Barbara Jung
DR. MEYER Verwaltungen AG
Morgenstrasse 83A
3018 Bern
barbara.jung@dr-meyer.ch
Tel. 031 996 42 57

Contact pour les ventes

Monsieur Jonas Glanzmann
DR. MEYER Asset Management AG
Schönburgstrasse 19
3000 Bern 22
jonas.glanzmann@dr-meyerassets.ch
Tel. 031 818 55 51

Ce projet est réalisé en collaboration avec Implenja Suisse SA

Depuis maintenant 10 ans, Implenja Suisse SA s'efforce d'innover en matière de construction

Implenia Suisse SA – Buildings

Rte du Jura 37A, 1700 Fribourg T +41 58 474 07 07

www.implenia.com



Implenia® conçoit et
construit pour la vie.
Avec plaisir.

2016-2017 INNOVATION AWARD FREWITT, SAMVAZ AND PMFCH CROWNED TOP INNOVATORS



The finalists in the SME Category: Antoine Viridis (Frewitt), Patrik Wullermin (Samvaz) and Evert Dijkstra (Phonak Communications).



In November 2016, more than 500 guests gathered to watch the canton of Fribourg honor its most innovative companies. It was also the perfect occasion to celebrate the 25th anniversary of the canton of Fribourg Innovation Award, which is organized by the Fribourg Development Agency, under the patronage of the Cantonal Department of Economic Affairs and Employment. Out of a total of 33 candidates, six companies made the 2016-2017 shortlist, with only three taking home the coveted award.

With prize money of CHF 10,000, the 2016-2017 SME Innovation Award went to Frewitt for its ingenious FreDrive-Lab system. Designed with the pharmaceutical, fine chemicals and food industries in mind, FreDrive-Lab can perform up to six different milling processes. The Start-up

Award, worth CHF 30,000, went to PMFch for its quick, simple and effective assembly system that can be used to build any kind of tubular structure – such as workstations, exhibition stands and furniture – from stainless steel, aluminum or steel square tubes, which all come with standard cross-sections.

The Cleantech Distinction, which comes with prize money of CHF 6,000, honors the canton's "greenest" innovator. The jury chose Samvaz and its sound-proofing corner angle made of recycled foam. This element, which is suitable for use in any kind of timber construction, significantly attenuates the transmission of sound waves without having to increase the thickness of the walls.

→ www.innovationfr.ch

FINALISTS

Finalists in the SME category

Frewitt SA – winner (see page 29)
Samvaz SA – Cleantech distinction
Phonak Communications SA (see page 19)



Frewitt



Samvaz



Phonak Communications

Finalists in the Start-up category

PMFch SA – winner (see page 31)
Setza SA (see page 61)
ViDi Systems SA (see page 55)



PMFch



Setza



ViDi Systems



Immer da, wo Zahlen sind.
Toujours là où il y a des chiffres.

Willkommen bei der Bank,
die auch ein KMU ist.

*Bienvenue dans la Banque qui,
comme vous, est une PME.*

Als lokale und unabhängige Bank sind wir selbst ein KMU. Deshalb kennen wir Ihre Herausforderungen und beraten Sie auf Augenhöhe.

En tant que banque locale indépendante, nous sommes nous-mêmes une PME. C'est pourquoi, nous connaissons bien les défis auxquels vous faites face et nous traitons avec vous d'égal à égal.

**Die Raiffeisenbanken des Kantons Freiburg
Les Banques Raiffeisen du Canton de Fribourg
www.raiffeisen.ch**

RAIFFEISEN

PANEL DISCUSSION

THE CHALLENGES OF DIGITAL TRANSFORMATION



A panel discussion on 1 December 2016, organized by the Cantonal Department of Economic Affairs and Employment (DEE) and the Fribourg Development Agency, addressed the challenges posed by digital transformation. "From a historical point of view, we live in an age that is on a par with the eras which saw the development of a writing system and the invention of money, both of which revolutionized how humans interacted." This statement was part of a speech made by David Bosshart, Director of the Gottlieb Duttweiler

Institute, an independent think tank on economic and social policy, to around 100 representatives of Fribourg's business and academic communities. "Inert, stand-alone products are being progressively replaced by smart, connected services that are being constantly updated." For Beat Vonlanthen, who was attending his last official event as Head of the DEE: "This revolution is set to dominate our lives for the next 10 to 20 years, ushering in changes that are beyond our wildest imagination."

AN ENHANCED DIGITAL EDITION

Fribourg Network Freiburg has already gone through its own digital revolution! The eBook version of the magazine, which was developed by local company Publiwide, comes with a host of multimedia features. Clicking on the icons (see *opposite*) provides access to exclusive online content, including additional articles, photos and videos. The eBook is available in English, French, German and Mandarin Chinese, and is compatible with PC and Macs, as well as Apple and Android tablets and smartphones. Click on the link below to read or download the digital edition. Enjoy!

→ www.fribourgnetwork.ch

Our partner for interactive content delivery:

→ www.publiwide.com



For more articles,
go to fribourgnetwork.ch



For more photos,
go to fribourgnetwork.ch



To watch the video,
go to fribourgnetwork.ch

- 17 MORE IN TOUCH WITH ITS WORKFORCE**
Geberit
- 19 HEAR, HEAR FOR DIGITAL TECHNOLOGY**
Phonak Communications
- 19 CARBON FOOTPRINTING FOR ALL**
Climate Services
- 21 HEAD IN THE CLOUD, FIRM FOOTHOLD IN THE MARKET**
CISEL
- 21 THE RIGHT TO FAIL**
Scout24
- 23 A LOCAL SUCCESS STORY THANKS TO A VISIONARY MEDIC**
DATAMED
- 24 ANNE MAILLARD**
Focus
- 24 CYRILL ELTSCHINGER**
Focus
- 25 THE POWER OF PIGGYBACKING**
Bcomp
- 25 THE RISE OF REGTECH**
IMTF
- 27 A MINI-FACTORY 4.0 FOR ENGINEERS OF THE FUTURE**
SeSi Institute / HEIA-FR
- 27 BIG DATA AND BUSINESS INTELLIGENCE**
JESA
- 29 3D PRINTING IS HERE TO STAY**
Frewitt
- 31 GUIDING MANUFACTURERS THROUGH DIGITAL TRANSFORMATION**
Technord
- 31 BESPOKE INDUSTRIAL DESIGN AT THE TOUCH OF A BUTTON**
PMF-System
- 33 INDUSTRY 4.0 IS UPON US**
WAGO Contact





1

PROCESS REINVENTION

Digital disruption is transforming how companies operate in an ever more smart and hyper-connected business environment. This major break with the past heralds a new era when services and industry will increasingly interlock thanks to more open and scalable digital systems. Ideal conditions then for the emergence of innovative, powerful and efficient processes.



datamed group

www.datamed-group.ch

more informations p. 23

Halim builds the
Gotthard Tunnel.

Phonak protects
his ears.

PHONAK

www.phonak-communications.ch

more informations p. 19

L//P

Agile Development
Liip.ch

more informations p. 39

[I M T F]

A great workplace
for talented
Software Engineers

<http://www.imtf.com/join-us/>

more informations p. 25

PROCESS REINVENTION
NEW FORMS OF INTELLIGENCE
A CHANGING SOCIETY

Thanks to "Pulse", a system which compiles thousands of data in real time, operators can make adjustments to the production line at any time.



GEBERIT

MORE IN TOUCH WITH ITS WORKFORCE

Geberit has ploughed a tremendous amount of resources into process optimization. At its plant in Givisiez, the specialist in sanitation equipment manufactures some 30 million meters of multilayer composite piping every year. The figures speak for themselves: in the space of five years alone, the Fribourg company has slashed its consumption of water (-97%), gas (-92%) and electricity (-35%), as well as drastically reduced its industrial waste (-75%), CO₂ emissions (-89%), occupational accidents (-94%) and even employee absenteeism (-96%). The upshot is a 210% rise in productivity. Reducing waste and inefficiency is all part of the lean management philosophy and its principle of continuous improvement. As Michel Pittet, Managing Director of the Givisiez

plant explains: "To be able to manufacture goods in Switzerland for a globalized market, you need to keep a tight rein on your production costs."

To help it achieve its ambitious goals, Geberit has embraced the Industry 4.0 concept and uses management, decision support and production tools that are becoming ever smarter and more connected: a real-time diagnostics system ("Pulse"), digitized and systematized document management, automated data exchanges with the Group's logistics center and suppliers, to name but a few. "Today, we are able to do more, and do it better, and all this with a smaller workforce. At the same time, our employees are better qualified, make better use of their skills and, above

all, are more involved in the company", the Managing Director proudly declares. "Before, we would spend entire days pouring over graphs, crosschecking data. New technologies provide us with some relief from this stressful analytical, allowing us to dedicate more time and energy to production and our working group activities. All in all, they allow us to be more in touch with our workforce."

→ www.geberit.com

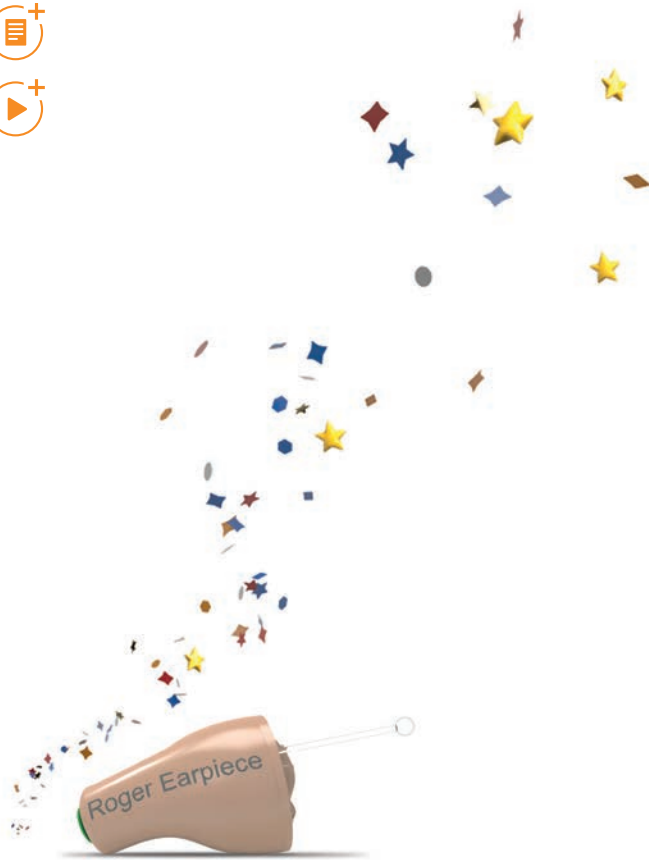


At the crossroads of cultures: an international University

Discover our offer:

studies.unifr.ch

PHONAK COMMUNICATIONS HEAR, HEAR FOR DIGITAL TECHNOLOGY



Weighing no more than 1.3 grams (including battery) and only 18 mm long, the wireless Roger Earpiece is almost invisible to the human eye.

Thanks to new technologies, ever more ingenious and innovative products make it to market. Yet, according to Evert Dijkstra, Director of Phonak Communications, these technological advances bring many other benefits, too. The provider of state-of-the-art hearing solutions, which made it on to the 2016-2017 Canton of Fribourg Innovation Award shortlist for its Roger earpiece, has thrown itself into a brand new project, the "patient journey". The aim is to offer the hearing impaired the best possible care and support at all times: from the detection of hearing problems (using tests that can be performed at home), to arranging appointments with a specialist and filling out forms, right up to remote hearing aid adjustments. "Ultimately, the process will comprise six separate steps, some of which we have already tested with the help from our partners." This approach has made the Murten-based company an industry trailblazer.

→ www.phonak-communications.com

CLIMATE SERVICES

CARBON FOOTPRINTING FOR ALL



Given that the reduction of harmful emissions has become an imperative for almost all companies, improving the accessibility of carbon footprinting services represents a major economic challenge. In June 2015, Climate Services launched "CO₂ Platform" to tackle this issue head on. By combining climate science and new technologies, the platform makes it easy to enter the data needed by businesses to obtain ISO 14064 certification. As Werner Halter, the company Director, explains: "It drastically reduces the amount of work involved and, by extension, the costs of carbon footprinting." A further advantage of the platform, according to the boss of Climate Services,

is that "as active participants in the process, our customers take ownership of their environmental protection responsibilities." The company, which is based in Fribourg's blueFACTORY, intends to go even further by exploiting the full potential that digitalization can offer. As Halter explains: "Once we have expanded our customer base, we will be able to create a database that will allow us to make comparisons and share best practices that are tailored to specific types of business, company size and region."

→ www.climate-services.ch
→ www.platfomeco2.ch

CISEL Informatique

L'expertise et l'innovation informatique à votre service depuis plus de 45 ans.

Eco-responsable, CISEL vous accompagne avec des solutions adaptées à vos besoins :

- Conseil, intégration de systèmes ERP SAP
- Conseils Réseau & Sécurité
- Solutions Cloud (CRM, RH, SAP HANA, Analytics,...)
- Hébergement dans 2 DataCenters 100% suisses
- Services managés & Délégation de compétences

www.cisel.ch

Matran – Rte de la Sablière 1 – CH-1753 Matran – T +41 26 557 59 00
Morges – Av. Riond-Bosson 12 – CH-1110 Morges – T +41 21 811 25 00

CISEL
it

Simple et performant

YOUR PARTNER IN DIGITIZED REAL ESTATE

immoscout24.ch

IMMO
SCOUT 24



CISEL HEAD IN THE CLOUD, FIRM FOOTHOLD IN THE MARKET



CISEL saw the potential of cloud computing long before most of its Western Switzerland rivals. "One of the main benefits of the cloud for our customers is that it does away with infrastructure costs", explains Nicolas Roch-Neirey, Managing Director of the Fribourg company, which specializes in IT outsourcing and ERP integration. "The pay-as-you-consume model provides companies with greater flexibility. This is really important for SMEs, our customer base." Something else which the Swiss business community puts much store in is data protection. "Our two data centers are in Switzerland, which means that our customers can be sure that their data will neither be stored nor processed abroad." Having established a firm foothold in the cloud-computing market, CISEL is now focusing its efforts on marketing automation, which it hopes will make it much more responsive to market needs. "The thinking behind it is to exploit data generated by digital communication. Take a weekly newsletter, for example. By analyzing who reads it and how, we are able to gain valuable insights that then let us determine the business potential."

→ www.cisel.ch

SCOUT24

THE RIGHT TO FAIL

Most innovative entrepreneurs will tell you that failure drives success. Olivier Rihs, Managing Director of Scout 24, is no different. "At our Flamatt site, we are constantly putting new services and functionalities to the test. Consumers will never hear of two-thirds of them." For the boss of this company, which manages the online platforms ImmoScout24, AutoScout24, MotoScout24 and anibis.ch, "New technologies have made it less expensive to fail. You don't need to have loads of money to launch several

versions of the same product. This is why our philosophy is "fail fast, fail cheap!", jokes Rihs. As a result, his team dares to be creative and explore entirely new avenues. "We plan to develop complete ecosystems around each of our platforms. For example, with AutoScout24, we could expand our services to include things like car insurance and the latest auto industry news."

→ www.scout24.ch

Prête pour des sensations de conduite inédites

La nouvelle Audi Q5



Découvrez la nouvelle transmission intégrale quattro qui, grâce à l'innovante technologie ultra, associe efficacité et sécurité. Autres avantages, le service gratuit pendant 10 ans et, sur demande, le LeasingPlus comprenant service et pièces d'usure, pneumatiques, mobilité de remplacement et assurances. Plus d'informations chez nous.

Audi Swiss Service Package+: service gratuit pendant 10 ans ou 100 000 km. Au premier terme échu.

Prête pour une course d'essai – dès maintenant!

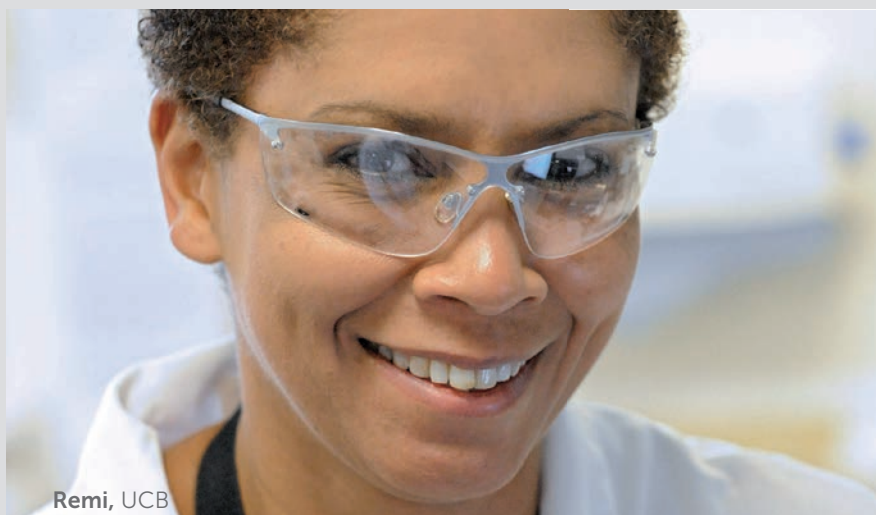
amag

AMAG Fribourg

Rte de Villars 110, 1701 Fribourg
Tél. 026 408 41 42, amag.fribourg@amag.ch

AMAG Bulle

Rue de Vuippens 55, 1630 Bulle
Tel. 026 916 13 11, www.bulle.amag.ch



Remi, UCB



Pushing the boundaries of science

Everything we do starts with one simple question:
"how will this make a difference to the lives of patients?"

UCB has a passionate, long-term commitment to help patients and families living with severe diseases lead normal, everyday lives.

www.ucb.com
www.ucbsuisse.ch



Inspired by patients.
Driven by science.

DATAMED

A LOCAL SUCCESS STORY THANKS TO A VISIONARY MEDIC



As the old adage goes, everything starts with a vision. This is certainly true of DATAMED. Back in the early 1980s, Jean-René Haag, a medical doctor with a tremendous fascination for IT, saw that there would be great potential from merging his two professional passions. Fast forward 40 years... and DATAMED, the company he founded, is an out-and-out success. Today, it is the Swiss market leader in laboratory information systems thanks to its modular software solution, DGLab. Launched in 1988 and continually improved since then, DGLab manages every single process carried out in a medical analysis laboratory. As Stephan Thommen, Managing Director of DATAMED, explains: "It allows laboratory instruments to communicate with hospital administrative solutions." Thommen attributes the success of the company, which is based in Villars-sur-Glâne, to "its ability to anticipate and integrate technological developments".

The fourth generation of DGLab is entirely cloud-based, a first for the sector. As for the data, they are stored in total security on the Swiss servers of OFAC (the Professional Association of Swiss Pharmacists). "This means that

our customers no longer have to buy servers or licenses. All they have to do is pay us a monthly fee." Thanks to this paradigm shift, access to the software is no longer limited to large laboratories. For DATAMED, this is an opportunity to scout for new segments and markets, with the agrofood and environmental sectors at the top of its list. "We are in talks with distributors with a view to internationalization", adds the MD. The Internet of Things is another avenue which the company's developers are currently exploring. As Thommen explains: "Via the cloud, we are now able to connect our software to all laboratory analysis devices and various other instruments like labeling machines. This is a real innovation that simplifies the use of our application considerably."

→ www.datamed.ch



**MEMBER OF THE BOARD
FRIBOURG CANTONAL BANK (BCF)**

ANNE MAILLARD

Has the BCF made the digital leap yet?

Yes, indeed. For example, our payment transaction processes – ATMs, e-banking and mobile banking – have long been digitized. We were also the first bank in Western Switzerland to offer our customers a complete online mortgage service. FRiBenk, the online tool we launched in 2016, lets customers become their own mortgage broker, without having to go through one of our advisers first. Once the customer has entered their personal and property-related information, FriBenk checks the application and delivers an answer in minutes. We pass on the efficiency gains to our customers in the form of up to 30% lower interest rates. At the moment, the service is open only to our private customers who wish to renew their existing mortgage or purchase a new home.

Is this the beginning of the end for face-to-face contact with customers?

No. Customer relations remain paramount. We developed our online services in response to demand from a certain section of the public that preferred to forgo banking advice in return for more favorable conditions. We are also involved in a number of digitization projects which aim to increase the effectiveness of our internal processes. Ultimately, the customer will also reap the benefits of these changes because the quality of our advice will improve and our already excellent cost-to-sales-revenue ratio will be even better.

What do you mean by "cost-to-sales-revenue ratio"?

The cost-to-sales-revenue ratio expresses the efficiency of a bank and is largely determined by the structure, processes and degree of automation of the organization. In 2015, our bank efficiency ratio was 34.05%. This was well above the Swiss average – 58% – for the same year.

→ www.bcf.ch



**A PIONEER OF INFORMATION
TECHNOLOGIES IN CHINA AND
AUTHOR OF "SOURCE CODE CHINA"**

CYRILL ELTSCHINGER

Which companies have the most to gain from digital disruption?

I'm tempted to say SMEs, given that access to the global market is possible without having to make major financial investments first. For these companies, the digital revolution is a stepping stone towards internationalization. For large companies, on the other hand, they now have to contend with the incursion of much smaller, and therefore more flexible, rivals on their territory. The 21st century is an era of continual and rapid change that demands much greater flexibility and adaptability.

We've had desktop computers, the internet and smartphones. What is going to be the next big thing?

In terms of data processing, computers have pretty much hit the first ceiling. The next step will be optimizing infrastructures to improve the transport of data, the volume of which and distances covered have increased exponentially. Once we have overcome this hurdle, we will be able to start working on new technological breakthroughs.

You've spent the last 20 years immersed in the world of new technologies. Do you see any drawbacks from these advances?

It is frustrating, particularly here in China, to have to attend a business dinner and your fellow guests remain glued to their mobile phone screens throughout the evening. We're still in the transition phase, which means that there is no "digital etiquette" as yet.

→ www.sourcecodechina.com

BCOMP THE POWER OF PIGGYBACKING

bCores, developed in Switzerland by Bcomp for use in ski and watersports equipment, are the lightest wood cores on the market.



Why would a company invest in an unwieldy – and costly – production line when new technologies enable it to hook up to existing systems, without having to compromise on all-important quality control? This is precisely the model that Bcomp has adopted since this specialist producer of natural fiber composites began operating in 2011. Not only does this approach make sound economic sense, it is also entirely in keeping with the principles of sustainability. As Managing Director Christian Fischer explains: “We chose interesting partners from around the world who were

already using ERP (enterprise resource planning), and had opted for a cloud computing system. This means that every member of the team can access the data they want anytime and regardless of whether they are on a ski slope or a business trip abroad.” So, what’s next for this winner of the prestigious SEF.Award in 2016? Bcomp is exploring the possibility of introducing a smart tracking system which will let them keep a very close eye on their products along the entire chain of production.

→ www.bcomp.ch

IMTF THE RISE OF REGTECH

IMTF has been providing process automation solutions in the international financial services industry for the past 30 years. With a workforce of 200 employees and offices in more than 50 countries, the company has successfully carved out a place for itself in the highly specialized and fast-growing RegTech market: “Compliance – efforts to ensure adherence to legislative or regulatory provisions (anti-money laundering, tax compliance, etc.) – is now the most important challenge that the banking industry faces today”, explains Mark Büsser, Managing Director of IMTF. “Our solutions let banks automate the entire onboarding and client lifecycle management process. They cover

all requirements end-to-end: intuitive capturing, know-your-customer compliance, risk management, forms and contracts as well as real-time integration with existing banking systems.” Also, screening and identity-matching technology make it possible to extract information from blacklists and the web relating specifically to new clients who wish to open a bank account. Not only does this improve search accuracy, it also generates more relevant and meaningful results.

→ www.imtf.ch

PROGRESSIA

FIDUCIARY AND MANAGEMENT COMPANY LTD



Our role in
your future
is important

- At your service for more than 50 years
- Extensive international experience
- English, French, German

Rue Saint-Pierre 18 | CH-1701 Fribourg
P + 41 26 350 35 00 | F + 41 26 350 35 99
office@progressia.ch | www.progressia.ch

 Member of EXPERTsuisse

Member of TREUHAND | SUISSE

 PrimeGlobal | An Association of Independent Accounting Firms



TOUGH CHALLENGES REQUIRE CUSTOMISED SOLUTIONS

A standard solution won't always be the perfect one. Which is why JESA develops tailor-made systems that fully respond to all customers' requirements. Specifications on the form, load, materials or sealing are responded to, resulting in a product that is ready to integrate. Maximum precision and an innovative approach are used in the process. You benefit from a one-stop solution which saves you time, capital and fixed costs.

JESA.
bearing solutions

SESI INSTITUTE/HEIA-FR

A MINI-FACTORY 4.0 FOR ENGINEERS OF THE FUTURE



The SeSi Institute (sustainable engineering systems), which is part of the Fribourg School of Engineering and Architecture (HEIA-FR), specializes in the integration of electronics and computer technologies in industrial processes. Its latest project concerns the acquisition of a smart factory, a type of modular small-scale production chain. "It's about adapting the content of our courses and our teaching to the new challenges that Industry 4.0 brings", explains Nicolas Rouvé, Professor of industrial engineering and co-lead on the project with Raymond Riess. The latter, who is a robotics expert, adds: "Our students, who are already well-trained in functional analyses, have to expand their minds and learn to think in terms of a global business model, which can be further enhanced by the many innovation opportunities that are out there." The mini-factory 4.0, which has been in operation since summer 2016, fosters synergies and the diverse skill sets that the HEIA-FR already has. In doing so, it paves the way for a new form of interdisciplinary and collective intelligence to emerge.

→ sesi.heia-fr.ch

JESA

BIG DATA AND BUSINESS INTELLIGENCE

"JESA doesn't have a set range of products that you can consult in a catalogue. For nearly every single customer, there is a different project, which in turn generates an almost unique product. On average, we deal with one new project every day", notes Thomas Doki-Thonon, a project engineer. The Fribourg company specializing in custom ball-bearing and plastic injection solutions is keen to make the work of its project managers easier. "We are developing a tool that can compile then analyze data on our many different products. By interpolation, the cost

of each unit will be calculated reliably and automatically, almost in real time", explains Doki-Thonon. "Nowadays, more and more customers want ever faster answers. So, we need to make sure that we can live up to these expectations. Big data and business intelligence is helping us achieve our goals."

→ www.jesa.com


FREWITT 

THE FUTURE IS NOW



Grinding, calibrating, dosing, weighing and packing powders form the very basis of our knowledge. Providing reliable and efficient solutions to the manufacturing process in the pharmaceutical, chemical and foodstuff industries is our mission. In-

novation and creativity are the key factors in our success; they form part of the culture of our business. They are strengthened by our partnerships with research institutions and universities.

 WWW.FACEBOOK.COM/FREWITTSA

WE
CARE
ABOUT
MILLING
WWW.FREWITT.COM

Saia PCD[®]

Automation for highest standards

**Flexible, sustainable solutions for energy,
building and infrastructure automation**

- ▶ Highest energy efficiency
- ▶ Modular and expandable
- ▶ Open communication along standards
- ▶ Easy handling, maintenance and care


SAIA BURGESS CONTROLS



Saia-Burgess Controls AG

Bahnhofstrasse 18 | 3280 Murten, Switzerland
T +41 26 580 30 00 | F +41 26 580 34 99
www.saia-pcd.com | info@saia-pcd.com



FREWITT

3D PRINTING IS HERE TO STAY

"Our most ambitious digital project to date is the creation of a 3D printing laboratory (see *photograph*) within our R&D department." For Antoine Virdis, Managing Director of Frewitt, the growing success of 3D printing is proof positive that this new manufacturing process is now a viable option. "3D printing is starting to turn conventional blueprinting on its head, and offers many more possibilities than existing processes. So that we are in a position to anticipate future shifts in the industry, we now have to make sure that our teams are well-equipped to work with this new technology. Before, we would outsource these activities to a local partner."

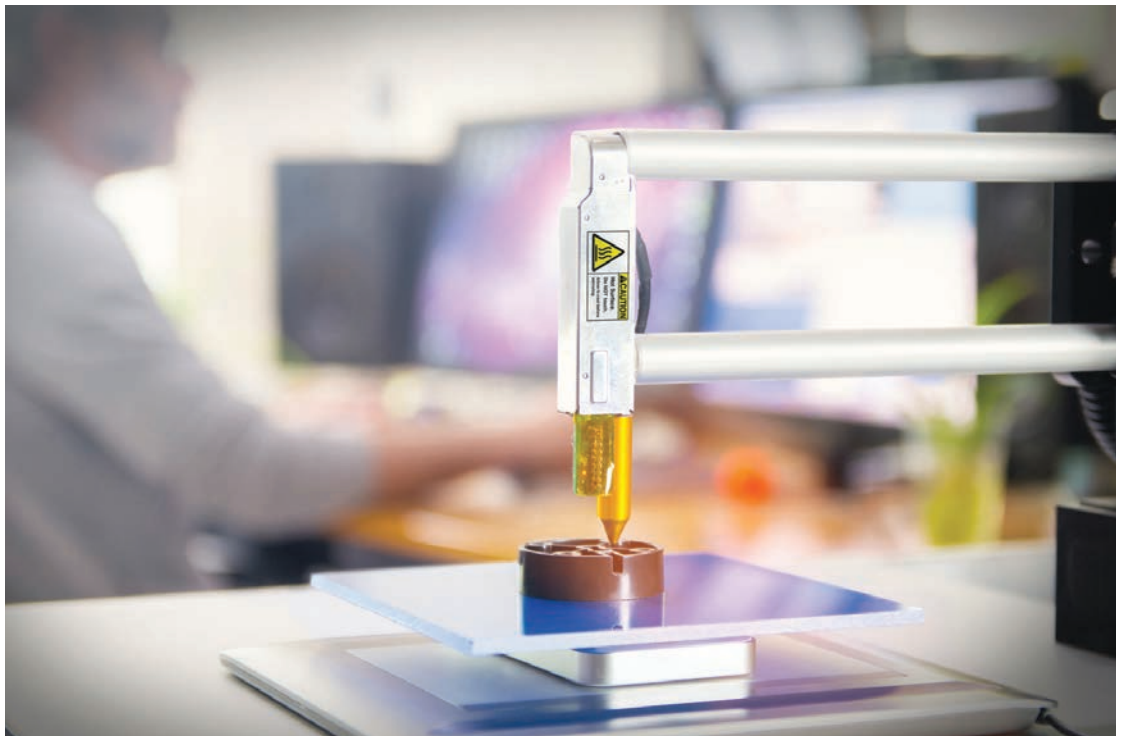
The machine manufacturer is also working on an online design tool for its distributors and agents. As

Virdis explains: "We want to leverage the potential of IT so that we can develop our services more effectively." Like many other SMEs, Frewitt has recently outsourced its IT architecture. It is already reaping the rewards: "Not only have we gotten a firmer grip on our operational costs, we also benefit from the outstanding security expertise of our IT provider. Outsourcing these skills lets us concentrate on our core business of developing high-tech solutions to mix, meter and transport powders of all kinds."

The Fribourg company has turned this manufacturing process into a fine art. Indeed, it won the 2016-2017 Canton of Fribourg Innovation Award in the SME category for its modular FreDrive-Lab system. Designed with the pharmaceutical, fine chemicals

and food industries in mind, this single machine can perform up to six different milling processes.

→ www.frewitt.com





WITH MORE THAN 800 STUDENTS, THE SCHOOL OF MANAGEMENT FRIBOURG (HEG-FR) IS THE PERFECT RESPONSE TO BUSINESS PARTNERS' EXPECTATIONS ON BOTH NATIONAL AND INTERNATIONAL LEVELS. Our school continues to grow by adapting to current economic situations and to the needs of the markets. This approach is evident in our innovation strategy. The range and quality of our training programs (at the Bachelor, Master and executive education levels) as well as the involvement and competences of our internationally recognized faculty are attract an increasing number of new students and applied programs.

HEG-FR, YOUR PARTNER IN INNOVATIVE SOLUTIONS
HEG-FR and its faculty members collaborate with local companies on applied research and development (R&D) projects and mandates. These projects help regional actors become more competitive and innovative by studying and analyzing current issues that will drive growth.

BOLOGNA PROGRAMS

- Bachelor of Science in Business Administration (the only trilingual Bachelor in Switzerland)
- Master of Science in Business Administration, major in Entrepreneurship and Innovation

EXECUTIVE EDUCATION PROGRAMS

- Executive MBA in Integrated Management
- MAS in Marketing management
- DAS in Management de la communication
- E-commerce training
- Fintech immersion
- CAS (Certificate of Advanced Studies)
 - Gestion d'entreprise
 - Gestion de projet
 - Supply Chain
 - Rédaction stratégique
 - Public Management
 - Entreprises de l'ESS
 - Management durable
 - Public affairs & lobbying



TECHNORD

GUIDING MANUFACTURERS THROUGH DIGITAL TRANSFORMATION

Reducing production costs is a major concern for highly competitive sectors like biotech, pharma, chemicals and agrofood. Thanks to the emergence of MES (manufacturing execution systems) around a decade ago, it has become easier to optimize manufacturing processes. As Vincent Delobel, Director of Technord Switzerland, explains: "Industrial computing means that we can now guide our customers through each step of their manufacturing processes." Based in the blueFACTORY innovation quarter, the Swiss subsidiary of the Belgium firm offers

two types of service. "On one hand, we install a production traceability chain for our customers by integrating software that communicates simultaneously with the existing management systems (such as SAP) and the machines." Secondly, by connecting to existing sensors and meters, Technord is able to generate a wealth of data "which we analyze and contextualize in order to calculate productivity levels and identify possible bottlenecks."

→ www.technord.com

PMF-SYSTEM BESPOKE INDUSTRIAL DESIGN AT THE TOUCH OF A BUTTON



To ensure their long shelf life, all PMF components are made from powder-coated steel.



Who said that manufacturing can't be fun? It was certainly not Lino Peverada, Managing Director of PMF-System. Three years ago, the start-up, which is based in the Marly Innovation Centre, launched its modular and quick assembly system, which is frequently compared to the famous interlocking Lego® bricks. In 2017, the company plans to launch an online tool that will let customers design their own industrial furniture using this system. "Our prize money from the 2016-2017 Innovation Award (PMF-System won in the Start-up category, ed.) helped get this project off the ground", explains the businessman. To this end, PMF-System set about identifying the kind of objects which customers ordered most often. "With just a few clicks on our website, customers will be able to adapt the size and color of our basic model, for example a table or trolley, to their specific requirements. The system then automatically generates and sends out a quote."

→ www.pmf-system.ch



WAGO is a **pioneering** international provider of electrical connector and automation technology. It is the **global market leader** in spring clamp technology.

The family-run company employs more than **7.200 staff** worldwide, around 500 of whom are based in **Domdidier**.

www.wago.ch

WAGO



Calibrating a high-precision assembly unit.

WAGO CONTACT INDUSTRY 4.0 IS UPON US

WAGO has been manufacturing printed circuit board terminals at its Domdidier plant for the last 40 years. "Thanks to our expertise and high efficiency rate, we are able to export what we mass-produce here in Switzerland to China and the rest of the world", proudly declares Frédéric Riva, Managing Director of WAGO Contact. The Fribourg company, which employs 500 people, owes this high degree of competitiveness to its lean management approach (a production excellence process) and Industry 4.0, a concept that is sometimes referred to as the digitization of manufacturing. "Industry 4.0 evolves in many different ways within our company. For example, our online configuration tool, smartDESIGNER, has expanded considerably in 2016", explains Riva. As a result, all WAGO products can

be displayed in 3D and the entire ordering process has become much simpler.

The Fribourg company has also set itself ambitious goals with regard to industrial asset management, the aim of which is to optimize the technical and economic performance along the entire production chain. Together with two partner firms, Stemys and Tornos, WAGO has developed a complete solution to monitor and manage interconnected equipment in real time. This platform, known as stemys.io, makes it possible to record temperatures, vibrations and electrical data in real time. "We have gone from statistical monitoring to systematic monitoring. This increases our yields and makes preventive maintenance possible", adds the Managing Director.

"Connected work" is another of WAGO's priorities. "Outsourcing resources to sister companies or external partners has rocketed, while suppliers and customers are increasingly involved in the production process", notes Riva. "By making machines more complex, Industry 4.0 is a wellspring of opportunity for Switzerland and its workforce."

→ www.wago.ch

- 37 WHEN IRONS
BECOME INTELLIGENT**
LauraStar
- 37 SOFTWARE THAT GIVES
ORTHOPEDIC SURGEONS
A HELPING HAND**
SeedIMPULSE
- 39 UNLOCKING
THE DIGITAL WORLD**
Liip
- 39 USING TECHNOLOGY
TO CATCH CRIMINALS**
Fookes Software
- 41 INFOGRAPHICS**
- 43 PEOPLE-CENTERED RESEARCH**
HumanTech Institute / HEIA-FR
- 45 DIGITAL TAKE-OFF**
Fribourg Freiburg Challenge
- 45 MAKING THE DIGITAL
ECONOMY A SAFER PLACE**
eb-Qual
- 48 PHILIPPE CUDRÉ-MAUROUX**
Focus
- 48 LAURENT SCIBOZ**
Focus
- 49 TWO NEW APPS,
MULTIPLE AWARDS**
TPF
- 51 CLEANER CITIES THANKS
TO BIG DATA**
Hymexia
- 51 THINK GLOBALLY,
IMPACT LOCALLY**
media f
- 53 BRINGING ANOTHER DIMENSION
TO SPORTS ANALYSIS**
Dartfish
- 53 MORE TO CCTV THAN
MEETS THE EYE**
Morphean
- 55 THE FUTURE IS BRIGHT,
THE FUTURE IS 3D**
Edy Toscano
- 55 MIMICKING THE HUMAN EYE
REVOLUTIONIZES VISUAL
QUALITY CONTROLS**
ViDi Systems



2

NEW FORMS OF INTELLIGENCE

Intelligence is not the exclusive preserve of human beings and other living creatures; it permeates almost everything, whether it be robots, software, mobile phones or day-to-day objects. Intelligence can now be had at the touch of a button. Connected products and services that come with added functions and offer more possibilities are targeted at specific groups, promising them the best possible user experience.



votre banque à portée de main

valiant.ch/app

Banque Valiant SA
Rue de Romont 6
1701 Fribourg
Téléphone 026 347 44 00

votre banque
en toute simplicité

valiant




créambule
visual creators

Everyone's own identity.

Need a graphic designer? creambule.ch

LAURASTAR WHEN IRONS BECOME INTELLIGENT



Laurastar was taking a gamble when it decided to update its core product using new technologies. The bet paid off: Laurastar has become the first manufacturer to develop a smart ironing system. The company has already showcased its new product at the IFA in Berlin, Europe's leading trade show for consumer electronics, and plans to launch it on the market sometime in autumn 2017. As Julie Monney, Head of Marketing at the world's leading manufacturer of professional ironing systems for domestic use, proudly explains: "We have taken this routine household chore to another level." Thanks to a movement sensor in the handle, the new iron "understands the user's movements and regulates the steam output accordingly". It is also the first ever Bluetooth-enabled iron. This means that it can connect to an app that dispenses handy ironing tips and advice (see photograph). "It lets you hone your technique, then tests and corrects it thanks to the built-in sensor. The upshot is the perfect ironing experience." That's not all. The Fribourg-based company is already exploring the possibility of adding more smart features, such as automatic textile recognition.

→ www.laurastar.ch

SEEDIMPULSE

SOFTWARE THAT GIVES ORTHOPEDIC SURGEONS A HELPING HAND

"Planning software allows surgeons to quickly and accurately prepare for their surgical procedures. Thanks to an innovative workflow and advanced automation, we were able to devise a tool that does just that", explains Julien von Siebenthal, who co-founded SeedIMPULSE with Ernesto Durante in early 2016. The start-up, which is based at Fri Up and specializes primarily in orthopedic applications, has developed a software solution that uses cutting-edge preoperative medical imaging. "Take hip replacements, for example. Based on 3D images, our system provides surgeons with the tools they need to

evaluate the morphology of the affected joint and decide what kind of prosthesis should be used. It accomplishes all of these processes within the standard radiology turnaround time, which means that the cost is reimbursed by health insurers." SeedIMPULSE has already won over a number of surgeons and health providers around Switzerland. Its software is expected to receive European certification in early 2017.

→ www.seedimpulse.ch

KNOW
HOW
INSTALLED

Mepla et PushFit

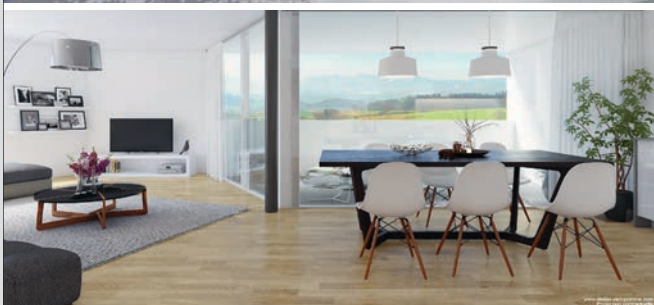
Des tubes multicouches « Ecodesign » pour une parfaite gestion de l'eau et une meilleure qualité de vie.

Geberit Fabrication SA / 1762 Givisiez / Suisse
www.geberit.com

GEBERIT



brieglipark
sie träumen - wir bauen



Your dream apartment at the heart of Briegli Park in Düdingen

246 new apartments surrounded by lush park grounds
2.5 / 3.5 / 4.5 / 5.5 rooms - for sale and for rent

Comfort and space

- Ideally arranged living spaces
- Large glass windows
- Terraces/loggias
- Washing machine and dryer in each apartment

Access and mobility

- 5 minutes to the motorway junction
- Bus stop in the park and TPF
- 331 underground parking spaces
- 33 visitor parking spaces

Nature and community

- Lush 25,000 m² park
- Beautiful unobstructed views
- Sheltered from traffic and noise
- Child-friendly environment

Real Estate Management

026 347 2900

www.brieglipark.ch

 **bulliard**
REAL ESTATE

LIIP UNLOCKING THE DIGITAL WORLD



"The digital world is extremely complex. Everything we do is about making it easier for our customers to find their way through this maze", explains Gerhard Andrey, Co-founder of Liip. Since its launch in 2007, the web development agency has gone from strength to strength. It now employs more than 150 people, and is a leading provider on the Swiss market. With a whole clutch of prestigious awards to its name (such as the "Best of Swiss Web" Awards and the "Meilleurs du Web", the industry's Oscars), Liip has built up a solid network of customers that include Migros, Swiss Railways and Swisscom. Liip also worked closely with the IT team of Raiffeisen Bank on the development of a

new intuitive banking platform for its increasingly mobile customers. For example, customers can now settle bills simply by scanning the reference number on their remittance slip using the camera on their mobile device; the application does the rest. Also, PhotoTAN technology provides a secure log-in, thereby doing away with additional devices, passwords and verification text messages.

→ www.liip.ch

FOOKES SOFTWARE

USING TECHNOLOGY TO CATCH CRIMINALS

NASA, the FBI, the US government and Visa are just some of the illustrious names on the order book of Fookes Software. So, how did this company, which can count its employees on one hand, do it? "Through the magic of digitization!" exclaims Eric Fookes who founded the business in 1996. Since then, Fookes Software has forged a world-class reputation largely thanks to the Aid4Mail pro-

gram it first started to develop back in 2003. "It is an expert solution for small- and large-scale mail migration and analysis. The lion's share of our turnover is generated by a highly specific forensics and eDiscovery license", explains the Charmey-based software developer. Aid4Mail boasts a wide range of features, including the extraction of data suitable for use by law enforcement agencies. It

can detect criminal activity and verify whether employees are disclosing confidential information. According to Mr Fookes: "Our customers pledge to abide by local laws governing the use of these data."

→ www.fookes.com
→ www.aid4mail.com



Gugler Elektronik AG is investing in the future!

Gugler Elektronik AG understood very early that a provider of electronic manufacturing services has to extend his services beyond the assembly of electronic modules.

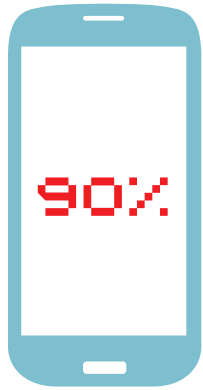
The company therefore invested in the last months in a flexible assembly line, combined with manual and automatic workstations. The new assembly line consists of 8 workstations with an integrated soldering robot cell. Plastic housings and plastic packages can be ultrasonic welded on two of the eight different workstations. Another workstation is equipped with a laser marking system for marking plastic housings.

The concept of the assembly line allows to be set up easily for different assembly and manufacturing jobs. Simple workpiece holders are responsible for the correct positioning of the workpieces. Different manufacturing or assembly jobs can be completed economically, thanks to short changeover times and low changeover costs.

Gugler Elektronik AG
Route de Chésalles 62, CH-1723 Marly
+41 26 435 31 31 – info@gugler-elektronik.ch
www.gugler-elektronik.ch

The soldering robot is responsible for soldering stripped strands efficiently and cosmetically clean.

Another very important investment was made in a clean room of a surface of 44 m² and a purity class according to ISO 8 standards. More and more medical technology orders request a purity that can only be guaranteed, when manufactured in clean rooms.



use a smartphone



use a laptop computer

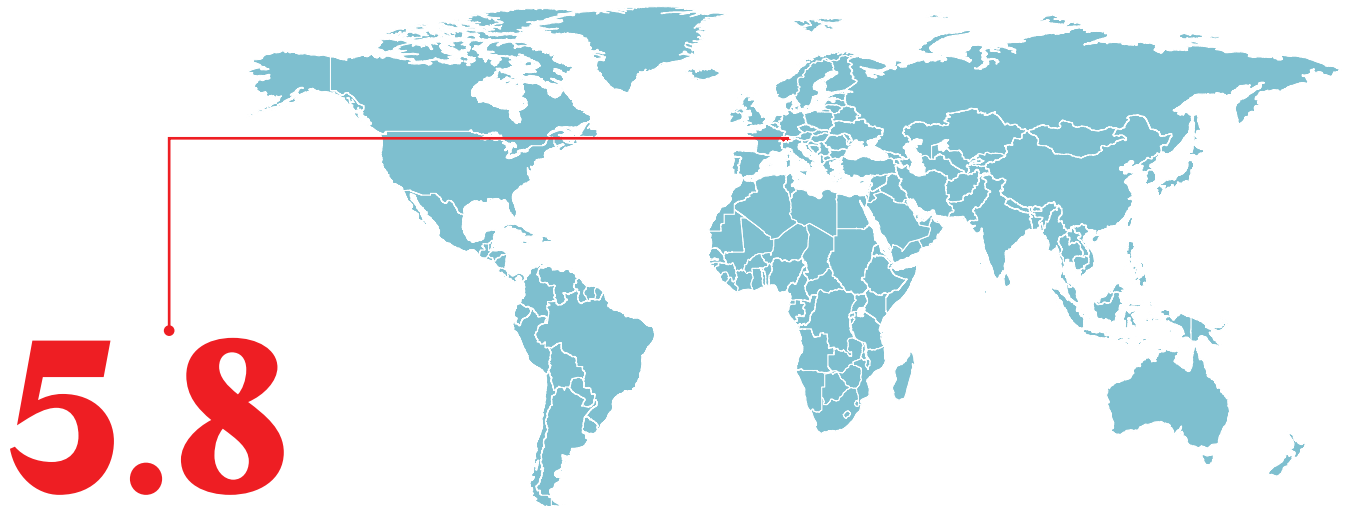


use a smartwatch



use an activity tracker

"The digital world is penetrating all parts of consumers' lives, and digital mobility has become the new normal." This was the conclusion reached by the study EY Digital Nations Switzerland, which looked at the readiness, attitudes and behavior towards digital consumption in Switzerland. It found that the population of the canton of Fribourg spends an average of 8 hours and 48 minutes per day on their digital devices, of which nearly 2 hours on a smartphone (owned by 90%). Equally, the penetration rates for laptop computers, smartwatches and fitness bracelets in Switzerland are higher than in other countries.



Of the 139 countries which the World Economic Forum analyzed in its 2016 annual report, Switzerland ranks 7th on the Networked Readiness Index. The latter, based on a scale from 1 (worst) to 7 (best), measures the propensity of countries to leverage the possibilities offered by information and communication technologies to boost competitiveness, inno-

vation and well-being. Switzerland scored 5.8, placing it in the top tier alongside Singapore (6.0), Finland (6.0), Sweden, Norway, the United States and the Netherlands (all 5.8), and ahead of the United Kingdom (5.7), Japan (5.6), Germany (5.6), France (5.3), Italy (4.4) and China (4.2).



THE POWER OF SYNERGY

THE SCHOOL OF ENGINEERING AND ARCHITECTURE
OF FRIBOURG, YOUR PARTNER FOR EDUCATION
AND INNOVATION

School of Engineering and Architecture of Fribourg
Boulevard de Pérolles 80 | CH - 1705 Fribourg
+41 26 429 66 11 | info@hefr.ch | www.heia-fr.ch



Haute école d'ingénierie et d'architecture Fribourg
Hochschule für Technik und Architektur Freiburg

Hes·SO
Haute Ecole Spécialisée
de Suisse occidentale
University of Applied Sciences
Western Switzerland

HUMANTECH INSTITUTE / HEIA-FR

PEOPLE-CENTERED RESEARCH 

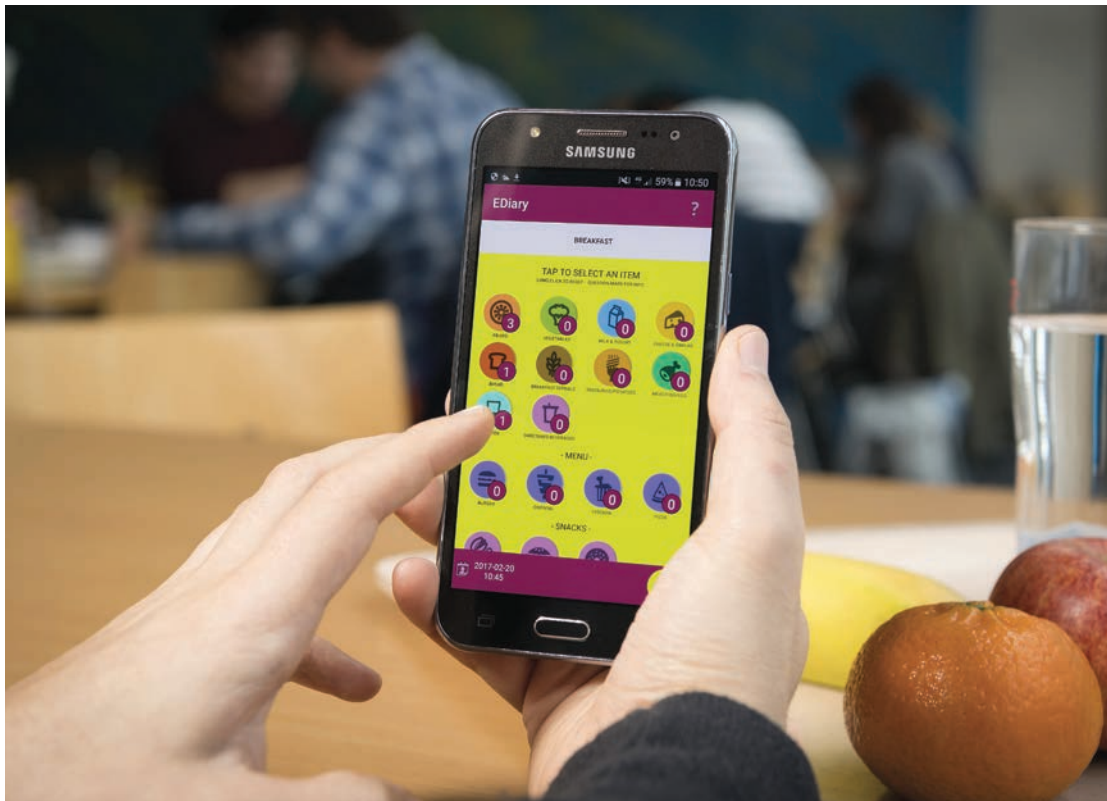
"Technology now pervades every single aspect of our day-to-day life. Sometimes it becomes oppressive and we ultimately submit to it. At the HumanTech Institute, we try to invert this paradigm by putting people right and center of our efforts." Elena Mugellini who heads up this unit, which is part of the Fribourg School of Engineering and Architecture (HEIA-FR), oversees research at the interface between technological, economic and human sciences. The European project PEGASO, which benefits from CHF 9 million in Swiss funding, is a joint initiative developed by partners in the UK, Spain, France, Italy and Romania. Its mission: to help prevent obesity among adolescents and young adults. "Instead of blaming technology, we use it to try to promote a healthier way of living." PEGASO comes in the shape of a mobile companion app featuring games, personalized advice, challen-

ges, a host of useful information, as well as a tracking function. "The ecosystem requires input from a wide range of disciplines, such as nutrition, psychology, design and engineering. Here, in Fribourg, we're responsible for the design and development of the app's technical features", explains Mugellini.

The HumanTech Institute is currently working on a number of other projects. PLUPART, a joint project with Lausanne University Hospital (CHUV), aims to devise a system to help amputees suffering from phantom pain. Thanks to augmented reality, a technology that is becoming increasingly accessible and usable at home, the future looks very bright indeed. The iNUIT research program applies the Internet of Things at a city-wide level to develop new services in fields such as physical security, mobility, resource management

and leisure. Some 20 people currently work for the institute, most of whom are professors, post-docs, doctoral students and engineers.

→ humantech.heia-fr.ch
→ pegasof4f.eu





Helveticum-Inkasso SA

Your collection expert in Switzerland

Helveticum Inkasso AG / SA
Rue de Romont 12
Case postale 726
CH – 1701 Fribourg

T +41 (0)26 347 58 58
M +41 (0)79 434 90 72
info@helveticum-inkasso.ch
www.helveticum-inkasso.ch

Patrick Haymoz
and his team

HELVETICUM
Inkasso SA-AG

L'App TPF se réinvente et devient **FAIRTIQ**



Le titre
de transport
le plus simple
de Suisse.

FAIRTIQ

Dès à présent,
valable dans tout le réseau Frimobil.

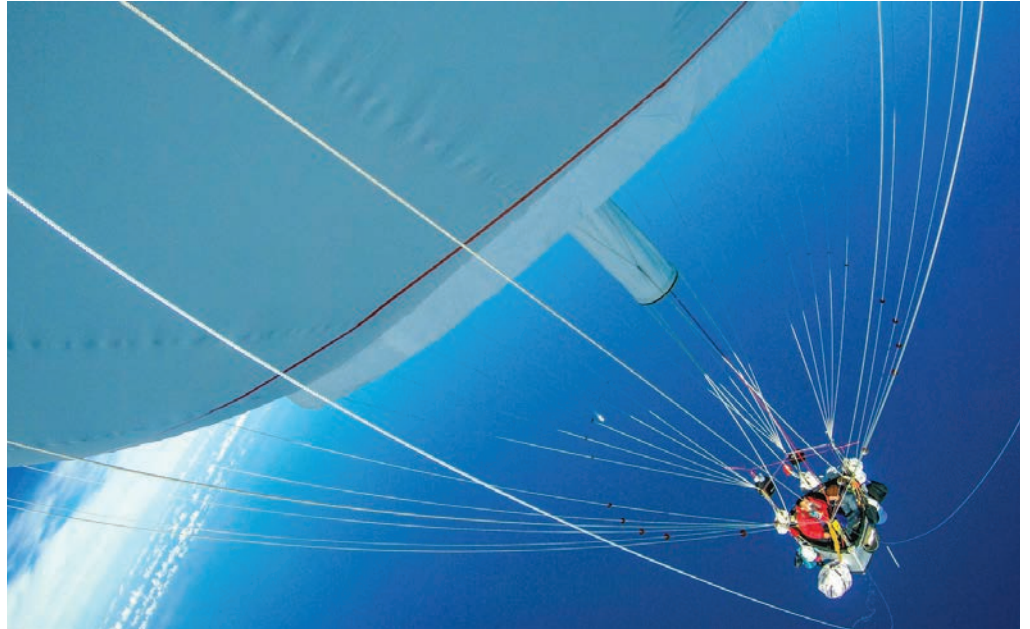


frimobil
Abonnez-vous à la simplicité

www.tpf.ch/fairtiq

tpf

FRIBOURG FREIBURG CHALLENGE DIGITAL TAKE-OFF



Smiling (and shivering) as their balloon rose above 5,000 meters and the temperature dropped to a bone-chilling -15 °C, Laurent Sciboz and Nicolas Tièche hit the headlines thanks to their performance at the 2015 and 2016 editions of the Gordon Bennett Cup (see photograph). However, there was less media coverage for the 20-strong support team back on terra firma, who oversaw the smooth running of the Fribourg Freiburg Challenge project. This group of meteorologists, route planners, air traffic controllers and IT experts collected an enormous amount of data which they crunched and contextualized to ensure that the two

balloonists had the best flight strategies possible. As Laurent Sciboz explains: "The team took advantage of several recent technological advances." These included numerical weather prediction and trajectory forecast modelling. For the 2017 race, which will begin in Fribourg in September, the two pilots also plan to use a predictive offload model developed in partnership with the Fribourg School of Engineering and Architecture.

→ www.frchallenge.ch

EB-QUAL

MAKING THE DIGITAL ECONOMY A SAFER PLACE

"For medium-sized and large companies, the question is not whether to opt for cloud computing, but rather when", declares Jacques Macherel, Co-founder and Managing Director of eb-Qual, a provider of state-of-the-art IT security and network automation solutions. For Macherel, these are key to successfully navigating the fast-moving world of the digital economy. "We primarily provide advice, as well as design, implement and maintain highly specialized solutions, most of which come from American suppli-

ers", adds Éric Oberson, Co-founder and Account Manager. eb-Qual has an impressive client list that includes private banks, multinationals based in Switzerland, major watchmaking companies and a number of cantonal and federal authorities. Since its founding in 2002, eb-Qual has become one of Switzerland's leading providers of IT security solutions.

→ www.eb-qual.ch

blueFACTORY

Fribourg – Freiburg

“blueFACTORY, the Innovation Hub for a blue lifestyle”
Its integration into the Switzerland Innovation Park makes it a key player in the low-carbon, high-efficiency urban landscape of the future. Intended to serve the economic, academic or cultural communities, it aims to create a harmonious ecosystem in the heart of the city, driven by research, human inspiration and synergies.

Location: Fribourg
Businesses: 40
Figures as of February 2017

Surface area: 54,000 m²
Jobs: 180

www.bluefactory.ch



We are a new type of industrial centre whose main aim is to be the perfect location for all business activities geared towards technological expertise and innovation.

Location: Villaz-St-Pierre
Surface area: 20,000 m²
Businesses: 30
Jobs: 170
Figures as of February 2017

www.vivier.ch

THREE INNOVATION HUBS FOR THE FRIBOURG ECONOMY



MARLY
INNOVATION
CENTER

Providing technological and artisan businesses with the appropriate infrastructure, which includes a large selection of laboratories, high-quality services and the synergy opportunities which can help them to grow and thrive.

Location: Marly
Surface area: 370,000 m²
Businesses: 130
Jobs: 400
Figures as of February 2017

www.marly-innovation-center.org





PROFESSOR OF INFORMATION TECHNOLOGY, UNIVERSITY OF FRIBOURG

PHILIPPE CUDRÉ-MAUROUX

In 2016, you received a grant of two million Euros from the European Research Council to fund your work on big data. Can you explain what your research is about?

The use and analysis of big data, the volume of which has literally exploded in the last few years, is revolutionizing our lives. My team of 12 researchers and I focus our efforts on tackling a fundamental problem faced by all large firms: the integration of textual content in big data infrastructures. At the moment, conventional software programs concentrate on what we refer to as "structured" data that can be presented in tabular form. They are incapable of understanding natural language, whether it be scientific documents, web pages or even tweets. The aim of my research project is to develop algorithms that can extract this textual content so that it can be saved in a big data-compatible format.

What kind of concrete applications will this research pave the way for?

There are countless applications. For example, we are currently working on a platform that will collect scientific publications from around world and then extract their core content. This will make it easier for researchers to navigate the oceans of documents that are published every year.

Should we be worried about the omnipresence of big data?

The effect of big data on our lives is direct, constant and growing stronger every day. Sooner or later, we will need to start thinking about and discussing the social and ethical boundaries that we want to incorporate into these algorithms.

→ exascale.info



HEAD OF THE ORGANIZATIONAL INFORMATICS INSTITUTE, HES-SO VALAIS-WALLIS

LAURENT SCIBOZ

The Institute that you run is one of Western Switzerland's largest software factories. What would you say are its core activities?

We are very active in the fields of eHealth, eServices, eGovernment and eEnergy. For example, where eEnergy is concerned, we mostly use machine learning-based predictive models that let us forecast with close to 100% accuracy such things as wind conditions in a given region. If it looks like not much wind power will be generated, certain devices can be programmed to shut off automatically if they are not needed at that particular moment in time.

The Internet of Things is one of your Institute's key strengths. How did this come about?

I discovered the Internet of Things during the couple of months I spent at Swissnex Boston in 2002. I had the opportunity to talk to specialists from the prestigious MIT (Massachusetts Institute of Technology) about it. I was totally won over and decided to import the idea to Sierre. That was 15 years ago, and we still haven't scratched the surface in terms of our research. I believe that the next stage will be the Internet of Everything, in other words devices that have a host of functions and are based on blockchain technology.

From the consumer's point of view, how can a company use new technologies to stand out from the competition?

Consumers increasingly want their products to come with digital services that can be accessed in one click on their smartphone. This could be information on the origins of the product, advice on how to get the most out of it or loyalty points, to name but a few.

→ twitter.com/laurentsciboz



TPF

TWO NEW APPS, MULTIPLE AWARDS

In 2016, Fribourg's public transport company, TPF picked up awards at "Best of Swiss Apps" and "Meilleur du Web" for its two new applications, Houston and FAIRTIQ (see *photograph*). The latter was developed in partnership with web agency Liip, Schucan Management, the canton of Lucerne's public transport operator and the Rhaetian Railways. FAIRTIQ builds on TPF's existing efforts to make it easier for travelers who seldom use public transport to purchase tickets. "Following the success of our SMS ticket service and our first smartphone application, we decided to go one step further", explains Helmut Eichhorn, Sales Director with TPF. Thanks to FAIRTIQ, users no longer need to familiarize themselves with the different fare zones before buying their ticket. They sim-

ply download the app on to their smart phones, click on the start button once they are on board, and then click on the stop button when they get off. "The system does the rest: it identifies the route taken, calculates the appropriate fare, and debits the amount directly from the user's account."

It is not surprising that other public transport operators in Switzerland have shown an interest in this technology. "Several new fare zone communities are set to come on board in 2017." The Houston application, which was also developed in partnership with Liip and Schucan Management, is a more flexible and less expensive alternative to the old radio network system which TPF drivers and the control center previously used to

communicate with each other. "We decided to leverage the excellent coverage that we already had", explains Grégoire Ramuz, head of IT with TPF. Houston uses VoIP (a technology similar to the technology behind Skype) and offers a number of very specific functionalities. For example, calls are entirely hands-free and, thanks to geolocation software, can be targeted specifically at other vehicles in the vicinity. "We are the first public transport operator in Switzerland to adopt this kind of technology", adds Ramuz.

→ www.tpf.ch



groupe 

Your local energy

Your trusted partners for energy matters

groupe  celsius  connect  entretec  greenwatt  groupe  plus

WE SHARE **MORE** THAN ENERGY

HYMEXIA CLEANER CITIES THANKS TO BIG DATA

Smart sweepers? Thanks to data analytics, they could be coming to a street near you.



"Data analysis has enormous potential for cities when it comes to optimising their fleet management", explains André Droux, Director of Hymexia. The company, which was founded in 2009 and is based in Châtel-St-Denis, specializes in the management of utility and municipal vehicles. According to Mr Droux, "Road sweepers spend a lot of time in traffic jams and their deployment is determined more by custom and practice than by actual need on the ground." At the end of November 2016, Hymexia management launched Cortexia, a spin-off specializing in big data. "We are in the process of teaching our machines to recognize objects like leaves and cigarette butts." Eventually, public vehicles like buses will be fitted with cameras that can detect rubbish, which will in turn make it possible to organize the road sweeping schedule more efficiently. Another winner will be urban planning, initially the siting of litter bins. The results of this project, which enjoys the backing of several major towns and cities around the world, are expected by the end of 2018.

→ www.hymexia.ch

MEDIA F THINK GLOBALLY, IMPACT LOCALLY

"When the Saint Paul Group (active in media and printing sector, ed.) set up media F, one of the aims was to respond better to the differing needs of its diverse customer base", recalls Romain Glasson, Managing Director of the media company. The figures speak for themselves: in the space of four years "the non-print share of our turnover has gone from 1% to nearly 10%." The digital service end of the Fribourg company's operations has also expanded; as well as online advertising and searching engine optimization, media F now offers, in partnership with Fribourg's public transport provider TPF, an internal and external display service. "Since 2015, most buses and trains on the TPF network have been fitted with screens which show the

news headlines and advertisements. Geolocation software also allows us to provide targeted content based on the vehicle's route." Another area in which media F is actively involved (since 2013) is e-commerce. For example, on the FRDEALS portal, bargain hunters can find a host of leisure, dining and wellness packages, all at knockdown prices. "What sets us apart from our major rivals here is that we systematically work with local partners on all of the deals that appear on the site."

→ www.media-f.ch
→ www.frdeals.ch



MAKE EACH DAY YOUR MASTERPIECE

NO SHORTCUTS

You know that it's more than an adrenaline fix – it's freedom. It's about being unhindered and uninhibited. It's about feeding your need for speed. So go ahead – gear up and get out there.

SCOTT-SPORTS.COM
© SCOTT SPORTS SA 2016 | Photo: Tanner Yeager



ESPACE GRUYERE

AT THE HEART OF THE EVENT

Espace Gruyère is honoured to be the "Host Partner of the 100th spring of the CCIF" on 20 March 2017, and bids you a warm welcome to this unforgettable evening.

Dear representatives of the Fribourg economy, we will be equally delighted to host YOUR next event and contribute to its success!

- | | |
|----------|-------------|
| FAIRS | EXHIBITIONS |
| SEMINARS | CONGRESSES |
| BANQUETS | COCKTAILS |
| EVENTS | CONCERTS |



1630 Bulle | +41 26 919 86 50 | info@espace-gruyere.ch

www.espace-gruyere.ch

DARTFISH**BRINGING ANOTHER DIMENSION TO SPORTS ANALYSIS**

Not content with successfully bringing its sports video analysis solutions into line with the opportunities offered by cloud computing, Dartfish is already preparing its next plan of attack. "The question we have to ask ourselves now is what else should we add to video analysis to make sure that every single minutia of a sport performance can be scrutinized", explains Victor Bergonzoli, CEO of the former start-up which made its name thanks to its image sequencing technology. "Take a soccer match, for example. Thanks to technology, each pass made on the pitch can be captured and counted, while sensors track the move-

ments of each player, making it possible to calculate their average speed and the total distance they cover during a game. Other information can also be harvested, like an athlete's maximum physical capacity and performance cycle. Building in these elements, and many more besides, will enable us to develop a multidimensional performance analysis solution." In an era when mastery of detail plays an ever more decisive role, Dartfish is making it easier to be 100% match-fit.

→ www.dartfish.com

MORPHEAN**MORE TO CCTV THAN MEETS THE EYE**

What Morphean excels at is leveraging its customers' existing video surveillance equipment to boost their business performance. According to Rodrigue Zbinden, Managing Director of the company that was founded in 2009, its hosted platform VideoProtector incorporates "three levels of functionality". The first is intelligent surveillance, whereby the system uses video and audio analysis to detect unusual or suspicious

activity. The second level is "using the data collected by VideoProtector to analyze customer behaviour, such as the amount of time they spend in a given aisle (see *photograph*) or the length of the check-out queue. Retailers can then improve their business processes, particularly staff management, based on the results of these analyses." The third and final level "generates information for the marketing department, such as the

age and sex of customers buying a specific product and how customers shop in the store". However, Rodrigue Zbinden is adamant that his company will never flout data protection rules.

→ www.morphean.ch

TOUTE LA SUISSE

à l'échelle locale

Brunnen Castione Chur Domdidier Fribourg Genève Lausanne Lugano Mesocco
Pontresina Poschiavo Rivera Schwyz St.Moritz Winterthur Zuoz Zürich

toscano.ch

«We have
big plans.
Credit Suisse
helps us.»

Manuel Grenacher,
founder and CEO Coresystems AG

Credit Suisse – the bank for entrepreneurs
credit-suisse.com/entrepreneur



EDY TOSCANO

THE FUTURE IS BRIGHT, THE FUTURE IS 3D

With 18 subsidiaries and a 350-strong workforce, Edy Toscano is one of the largest providers of engineering, planning and consultancy services in Switzerland. To make sure that it stays ahead of the game, the company has set itself a very ambitious goal: to roll out BIM (building information modeling) across the entire organization by 2021. "Building information modeling is a game-changing advance when it comes to planning and managing building projects. At Edy Toscano, we already create 3D models of

various parameters like statics and formworks", explains Guy Chardonnens, Manager of the Villars-sur-Glâne office. When used to its fullest potential, BIM transforms how structures are planned, designed, constructed and managed. "The impact on architects and consulting engineers will be as far-reaching as when computers replaced drawing boards."

→ www.toscano.ch

VIDI SYSTEMS MIMICKING THE HUMAN EYE REVOLUTIONIZES VISUAL QUALITY CONTROLS

Screenshot of the ViDi Suite software in practice: here, the automatic detection of cosmetic imperfections on a watch dial.



Why entrust human staff with repetitive and often tedious tasks? To answer that question, ViDi Systems developed artificial intelligence software that mimics the functioning of the human eye, making it possible to automate inspection processes that are beyond the power of conventional machine vision. The ViDi suite is an image analysis software solution that consists of three different tools. "The first can sort products into categories", explains Olivier Despont, Head of Business Development at ViDi Systems, part of the CPA Group. For example, a machine can learn to recognize the contents of a crate, just like the human eye would. The second detects anomalies: "One of our watchmaking customers, for example, uses our system to perform quality control on its watch and clock dials. Where once 60 people were involved in this process, five machines now carry out this work. This frees the human workforce to focus their efforts on more rewarding activities." The third tool, the only one of its kind in the world, can locate and identify objects in an image, such as a certain type of vehicle in traffic.

→ www.vidi-systems.com

- 59 **DIGITAL FORMATS AND AUGMENTED REALITY**
Sept.info
- 61 **AN END TO ROOM RESERVATION NIGHTMARES**
Setza
- 61 **HARNESSING THE POTENTIAL OF DIGITALIZATION**
HEG
- 63 **MAKING PERSONALIZED LEARNING A REALITY**
OLF
- 63 **A PASSION FOR BIG DATA**
Sqooba
- 65 **INFORMATION DESIGN: MAKING THE COMPLEX SIMPLE**
eikon
- 66 **PONY DEL SOL**
Focus
- 66 **FRÉDÉRIC MAURON**
Focus
- 67 **SOLVING FLEXIBLE WORKING DILEMMAS**
dashcom
- 67 **A BUSINESS MODEL FOR ONLINE EDUCATION**
Swiss Learning Exchange
- 69 **BETTER QUALITY OF LIFE THANKS TO MOBILE DATA**
Swisscom
- 71 **TECHNOLOGY: A SHOT IN THE ARM FOR SURGEONS**
SICHH
- 71 **HELPINGS SMES AND EDUCATION CAPITALIZE ON BIG DATA**
iCoSys Institute / HEIA-FR



A young boy and girl are looking at a tablet together. The boy is on the right, wearing a blue shirt, and the girl is on the left, wearing a white shirt. They are both smiling and looking at the screen. A white shield-shaped icon with the number 3 is positioned above the text.

3

A CHANGING SOCIETY

Digital transformation is not only technological. It is changing the paradigm of society itself, completely reshaping every aspect of our day-to-day lives. It is a catalyst, opening new doors and paving the way for progress. Society is the driver of change, digitization the accelerator.

Fribourg Development Agency

PROMFR.CH

The Business Magazine of the Canton of Fribourg

FRIBOURGNETWORK.CH



SEPT.INFO

DIGITAL FORMATS AND AUGMENTED REALITY



"When we launched Sept.info in 2014, one of our main aims was to find possible new business models for the newspapers of the future", explains Patrick Vallélian, Editor-in-Chief of the online journalism platform. This "laboratory of information" is the first of its kind in Switzerland to focus exclusively on the provision of investigative and literary journalism. Its pure play approach has paid off, with Sept.info making a name for itself well beyond Switzerland's borders. For example, it made the shortlist for the prestigious Albert Londres Prize in 2016, and recently won the Nicolas Bouvier Award for Journalism in Geneva. Unlike most of its online competitors, the media company based in Villars-sur-Glâne opts for long-form reports and investigative articles that users pay to access. As Vallélian explains: "Our

philosophy is to afford ourselves space, time and depth." Indeed, Sept.info has mastered the fine art of fusing the speed of the digital world with the slowness of reading. Sept.info management, though, have not abandoned the print world entirely. Twice a month, the platform publishes a "mook" [combination of "magazine" and 'book'] featuring a selection of the best of its online content. The periodical is now also sold in Belgium, France, Canada and Luxembourg.

However, this is not a retrograde step. "Augmented reality allows us to offer a three-dimensional reading experience." By scanning pages of the mook using their smartphone, readers gain access to additional content, such as 360° videos and 3D images. "Essentially, it is a circular

process: the web feeds the paper, which in turn feeds the web and ultimately the virtual world", notes the editor-in-chief. As part of its unceasing quest to offer its readers innovative, custom solutions, Sept.info has launched a free-pricing system on its website. This means that the reader pays an amount of their choosing to access their preferred content. "This service is aimed first and foremost at younger readers who prefer to buy per article rather than take out a subscription." Let's hope that this creative rush will continue in 2018 when the MEDIAparc group, which includes Radio Fribourg and la Télé, comes on board the Sept.info ship.

→ www.sept.info

PROTECTING
AND GROWING
YOUR WEALTH
FOR FUTURE
GENERATIONS

Private Banking



**EDMOND
DE ROTHSCHILD**

CONCORDIA - INTEGRITAS - INDUSTRIA

The lion on our emblem symbolises
the strength and excellence at the
service of our clients every day.

edmond-de-rothschild.ch



EDMOND DE ROTHSCHILD (SUISSE) S.A.

#innovative



#inspiring

#SUV



#edgy

#different

La nouvelle Audi Q2

#edgy #innovative #untaggable

La nouvelle Audi Q2 est destinée à ceux qui ne se laissent pas cataloguer et qui mènent leur vie de manière confiante, avisée et personnelle.

AMAG Fribourg

Rte de Villars 110, 1701 Fribourg
Tél. 026 408 41 42, www.fribourg.amag.ch

AMAG Bulle

Rue de Vuippens 55, 1630 Bulle
Tél. 026 916 13 13, www.bulle.amag.ch

SETZA AN END TO ROOM RESERVATION NIGHTMARES



It is the classic workplace problem: a manager has booked a meeting room for a team talk, but just as he and his co-workers are about to open the door, they notice that the room is already taken. "What happens next is a lot of toing and froing in the corridors because not even the boss has mobile access to the company's internal reservation system. More often than not, the meeting does go ahead, albeit beside the coffee machine." Roger Meier, Managing Director of Setza, therefore set out on a search "for an extremely simple technical solution" to the problem. The result is ROOMZ, a digital reservation system which

displays the complete booking status of a given meeting room on a screen outside the shared space (see *photograph*). ROOMZ is also the first system of its kind in Switzerland that is completely wireless. As Meier explains: "All you have to do is stick the screen on to a surface, activate the wifi and then connect it to your company's reservation system. A dozen or so meeting rooms can be fitted out with the product in only a matter of hours." ROOMZ earned Setza a place on the shortlist for the 2016-2017 Canton of Fribourg Innovation Award.

→ www.roomz.io

HEG

HARNESSING THE POTENTIAL OF DIGITALIZATION



No SME can escape the economic – and societal – upheaval generated by the digital boom. To equip managers from French-speaking Switzerland with the tools they need to successfully ride the digital wave, the Fribourg School of Management (HEG) has created and runs a series of continuing education modules on various aspects of digital transformation. "We found that there was a demand for intensive, short courses on highly specific topics", explains Jean-Marie Ayer, Professor at the HEG and head of this new service that was launched in March 2017. These immersive modules use real-life cases to address subjects like smart cities, big data, the

collaborative economy, transport and industry 4.0. For example, the first module, which focuses on Fintech, includes "three days of theory in Fribourg, followed by two days of practical work with specialist start-ups in London". So, what sets HEG apart from its rivals? "We can count on an international network of experts and on the input and expertise of all of Fribourg-based members of the HES-SO network (University of Applied Sciences Western Switzerland)."

→ www.heg-fr.ch



FIDUCONSULT

ACCOUNTING FIRM FOR EXPERT OPINIONS AND AUDIT LEGAL AND TAX ADVICE

PARTNER FOR LOCAL BUSINESS



Fribourg

Fiduconsult Fribourg Ltd.
Rue des Pilettes 3
1705 Fribourg
Phone +41 26 422 72 00
fiduconsult@fiduconsult.ch



Bulle

Fiduconsult Bulle Ltd.
Rue Lécheretta 11
1630 Bulle
Phone +41 26 913 00 40
bulle@fiduconsult.ch

WWW.FIDUCONSULT.CH

CERTIFIED AUDITORS

FIDUCIAIRE | SUISSE

 Membre d'EXPERTSuisse

Membre indépendant de  EuraAudit International

FRIBOURG | BULLE | LAUSANNE | YVERDON | GENEVA | NEUCHÂTEL | LA CHAUX-DE-FONDS | SAIGNELÉGIER

YOUR MEETING POINT!

www.fribourgregion.ch



Looking for a place set in the green to hold successful meetings, conferences, seminars or incentives?

Visit our website www.fribourgregion.ch or contact us under T. +41 (0)26 407 70 20



OLF MAKING PERSONALIZED LEARNING A REALITY



Situations where one half of the class speeds through their exercises, while the other half struggles to keep up, will soon be a thing of the past. "Schools in the Netherlands have already started to adapt content and coursework to the learner rather than the other way round", explains Nicolas Moser, head of business development with the Office du livre de Fribourg (OLF). "In Switzerland too, the next stage will be the use of big data to create personalized learning experiences." Since it launched its digital platform back in 2009, OLF, a Swiss eBook pioneer, has gone on to become an eLearning leader. Since the start of the 2016/2017 academic year, close to 10,000 upper-secondary school students from some 50 schools in both French- and German-speaking Switzerland have been using Schoolbag, an ingenious digital tool that provides learners with access to interactive content. "The role of teachers is fundamentally changing. This is a major challenge that the profession as a whole will have to get its head around."

→ www.olf.ch
→ www.schoolbag.ch

SQOوبا A PASSION FOR BIG DATA

"One of the consequences of digitalization is that companies now find themselves having to manage an ever-expanding volume of data. Businesses that exploit this resource to its fullest have a clear advantage over their competitors." During their many visits to Silicon Valley, Daniel Neuhaus and his fellow Sqooba Co-founders, Benoit Perroud and Theus Hossmann, observed that the degree of digitization among businesses varied considerably. This is where the trio came up with the idea of dividing the process of implementing big data strategies into three distinct parts. The first is co-creation. "Many bosses think that all they need to explore the vast ocean of data

is to buy the right software. Unfortunately, they're sadly mistaken: it requires a wholesale cultural transformation!" The second service offered by Sqooba aims to "use data that are already available more quickly and easily". Finally, Sqooba has developed an open-source platform, "Ocean", which is powerful enough to incorporate data from entire sectors of the economy. The start-up already has several multinationals and renowned companies in Switzerland on its books.

→ www.sqooba.io

Components for your Equipment.



Liebherr as a strong partner for systems expertise

In Bulle (Switzerland) eleven different categories of diesel engines, from 130 kW to 750 kW and gas engines in performance classes 100 kW to 516 kW are developed and produced. For more than 30 years, Liebherr has also developed and manufactured hydraulic axial piston pumps and motors as well as hydraulic valves and components at this location. A range of gearboxes complete the product portfolio. These complete systems equip our customers with a modern and powerful drivetrain for their machines.

Liebherr Machines Bulle SA
45, rue de l'Industrie
1630 Bulle/FR, Schweiz
Tel.: +41 26 913 3111
www.facebook.com/LiebherrConstruction
www.liebherr.com

LIEBHERR

EIKON INFORMATION DESIGN: MAKING THE COMPLEX SIMPLE



In 2014, eikon, Fribourg's Vocational School of Applied Arts, did away with its multimedia design major, replacing it with a training program in the fast-growing discipline of interactive media design (IMD). "It's about translating the continual flow of often complex information into a visual, and therefore easier-to-understand, language. It isn't about oversimplifying this information but rather adding value to it. Through the fusion of image, text and typography, sometimes in a dynamic and interactive way, information design is highly effective at uncovering fluxes, trends and priorities", explains Nicolas Stevan, Director of eikon. This ability to visually structure data is increasingly sought after in fields as diverse as marketing, media, research and education. "Augmented reality, which is essentially the integration of information in the form of 2D or 3D elements into a real image, is another up-and-coming market." eikon and the Swiss Integrative Center for Human Health (SICHH) have joined forces to work on several projects involving information

design. "These programs are still confidential but what I can say is that they deal with patient rehabilitation and recovery as well as the design of highly specialized training courses for health professionals", adds Nicolas Stevan. "New technologies mean that IMD is a profession which is evolving on an almost constant basis. It is our job to make sure that the content of our training programs takes account of these changes."

→ www.eikon.ch



**GAEL KYRIAKIDIS, AKA PONY DEL SOL,
MUSICIAN**

PONY DEL SOL

You turned to the crowdfunding platform "We make it" to pay for your first album. What gave you the idea?

I hadn't been able to save enough money to record the album. I discovered "We make it" on Facebook, and kind of took the plunge there and then.

Besides collecting enough money, what else did you learn from the experience?

Crowdfunding allowed me to connect directly to the public. It was the first time I reached out to my listeners... and my first promo! At the same time, though, I realized that if I was to bring investors on board, I had to be really clear from the off about what I wanted to do. This was actually really good for me. Mind you, the sharing economy is not without its challenges. First of all, you need to find the courage to ask for money (whether you know the people or not). Second, if you don't manage to collect the full amount, all of your fundraising efforts go out the window. Third, you have to make sure that you use the funds you raised for their intended purpose, i.e. make an excellent record!

What impact do new technologies have on your day-to-day life as a musician?

The new tools that are around now give me a lot more independence, particularly when it comes to arranging and recording my songs. I really appreciate having direct access to every part of the creative process. Nowadays, artists can publish their work on digital platforms. It was a completely different story 10 years ago: the only option we had then was to record a demo on a physical medium with limited broadcast potential.

→ www.ponydelsol.ch
→ www.facebook.com/ponydelsol



**MANAGING DIRECTOR OF FTTH FR SA
FRÉDÉRIC MAURON**

What is the mission of ftth fr?

ftth fr is a private company, set up in 2012 and jointly owned by the Canton of Fribourg and three of the canton's electricity suppliers: Groupe E, Gruyère Energie and IB-Murten. Its mission is to install and deploy a fiber-optic network across the canton so as to prevent the emergence of an urban-rural digital divide. Our initials stand for *fiber-to-the-home*.

Is the project making headway?

Almost one third of the 150,000 homes in the canton of Fribourg now have a fiber-optic connection, though most of these are in urban areas. In 2017 and 2018, we plan to focus our efforts on areas where the population density is low. The need is particularly acute in these places due to already poor telecom coverage. Our ultimate goal is to connect more than 90% of residential properties and 100% of companies to the network. We've already invested around CHF 27 million of our total CHF 200 million budget.

Why has fiber optic technology become so important?

It is vital for a country like Switzerland to have powerful connections: broadband access is now as important as the electricity or water supply, and demand for bandwidth doubles every 18 months or so. Unlike copper which is still preferred by certain operators, FTTH is the only technology that has the long-term capability of absorbing this increase in data traffic. For ftth fr shareholders, this project is about investing in the future.

→ www.ftth-fr.ch

DASHCOM**SOLVING FLEXIBLE WORKING DILEMMAS** 

"Flexible working is definitely on the rise: an increasing number of companies offer looser working arrangements and the freelance community is growing", declares Philippe Jemelin, Managing Partner of the Fribourg start-up dashcom. The knock-on effect is that desks and shared spaces are under-occupied. "We therefore came up with an occupancy optimization solution that connects the physical space to the digital landscape." The flagship product of this big data-driven company is dashwork, an application which lets the user find the nearest empty office or meeting room. "We equip companies with tiny beacons that

alert them when a room comes free. Take, for example, someone who works for a company which has different sites around the country. She has arranged to meet a client who is based in another town. All she has to do is whip out her smartphone and our app will immediately show her which rooms are available at her chosen destination."

→ www.dashcom.ch

SWISS LEARNING EXCHANGE**A BUSINESS MODEL FOR ONLINE EDUCATION** 

"Thanks to new technologies, we have the tools to completely revolutionize the learning experience", explains Satyadeep Rajan excitedly. The President of Swiss Learning Exchange (SLX) has called on the Swiss education community to "embrace digitization as a means to export its expertise". While he admits that MOOC (massive open online courses), which a growing number of education providers now

offer, are "amazing initiatives", Rajan and SLX want to go one step further. So, what exactly do they want to do? "Monetize content based on public-private partnerships." Together with the Fribourg School of Management (HEG), the company that is based at the blueFACTORY has developed a CAS (certificate of advanced studies) in business analytics for managers. This module, launched in spring 2017,

teaches company management – particularly in SMEs – how best to incorporate data analysis findings into their decision-making processes. SLX has also recently announced partnerships with the Universities of Fribourg and St. Gallen.

→ www.swisslearningexchange.com

YOU CAN'T
FLY AROUND THE WORLD
WITHOUT FUEL.
WHY NOT?

#PushingBoundaries #SolarImpulse

Find out more about our technologies and high-tech polymers that push the boundaries of possibility. For a more sustainable and brighter world. covestro.com



DÉCOUVREZ
NOS PRODUITS BUSINESS!



INTERNET - TÉLÉPHONIE - TV

Je veux en profiter : 0844 477 477
Je veux en savoir plus : netplusfr.ch/business



SWISSCOM

BETTER QUALITY OF LIFE THANKS TO MOBILE DATA



The concept underpinning the smart city vision is the integration of digital technologies to enhance quality of life. The Swiss communications company Swisscom was won over by the idea and decided to exploit the full potential of its enormous volume of mobile data and use it to tackle mobility challenges. "We successively established partnerships with the towns of Pully, Montreux and Fribourg, and set about launching pilot projects there", explains Raphael Rollier, the Program Director. The Fribourg project, which began in late 2015 and finished one year later, was jointly implemented with the engineering consultancy firm Transitec. "Traditionally, road meters record traffic volumes in downtown Fribourg. However, our data provide a more detailed yet broader picture." Project management was especially interested in determining the ratio between the different types of traffic (transit, park-and-ride and within the city). "Unsurprisingly, our work focuses on transit traffic, the reduction of which municipal leaders have made a top priority." Findings from the Pully project showed that transit traffic accounted for a 60% share, whereas in Montreux the share was 20%. The Fribourg results will be ready sometime in 2017.

The Smart City program optimizes the analytics by collecting anonymous digital tracks, which Swisscom customers leave behind. "Every time a smartphone connects to one of our aerials, we receive actionable information in real time. Five years ago, there was not enough data, but the arrival of 4G, which 98% of the Swiss population now has access to, means that our customers are connected on an almost permanent basis", explains Raphael Rollier. Thanks to the Swisscom project, many mobility-related decisions in the future will be made based on accurate indicators. "Take the construction of a new park-and-ride facility, for example. The data that are collected will make it easier to determine the best location and what its capacity should be."

→ www.swisscom.ch



The Swisscom program focuses on the analysis of transit traffic in Greater Fribourg.



- Experimental Design & Consulting
- Research & Development
- Data Analysis

Research & Development Solutions

Swiss Integrative Center for Human Health SA offers custom R&D solutions for industries and academia in Medtech, Biotech, Foodtech and Pharma. Our specialists combine their know-how in Chemistry, Physics, Informatics and Biology together with next generation technologies to support the innovation process in Switzerland and abroad.

SICHH

Swiss Integrative Center for Human Health
A Unique Competence Center in the Heart of Switzerland

Halle Bleue | blueFACTORY | Passage du Cardinal 13B | 1700 Fribourg | +41 26 300 65 01 | info@sichh.ch | www.sichh.ch

Around the globe, and right next to you.

At KPMG Switzerland, we assist you in your markets entry. We provide valuable knowledge and support you with experienced specialists. We help you setting up your company and managing tax & legal requirements. Let's get ahead together – talk to us.

Ivo Gut, Partner
+41 58 249 20 60, igut@kpmg.com

kpmg.ch



© 2017 KPMG AG is a Swiss corporation. All rights reserved. The KPMG name and logo are registered trademarks.



SICHH

TECHNOLOGY: A SHOT IN THE ARM FOR SURGEONS

Thanks to its highly specialized expertise and cutting-edge technologies, the Swiss Integrative Center for Human Health (SICHH), based at the blueFACTORY innovation quarter, is able to deliver state-of-the-art research and development services to the health care industry. "Our Ergonomics platform develops software applications that center around the human-machine interface", explains Jean-Marc Brunner, Director of the SICHH. Several programs focus on the immersive experience, intelligent sensing experience, and smart learning and rehabilitation. "The smart learning and rehabilitation program seeks to use digital technologies like augmented reality (see *photograph*) to improve learning experience in specialized fields. For example, it will let a surgeon perform a dry run before the actual surgical procedure or will overlay what the medic actually sees with computer-generated images, thereby improving her performance in the operating theater. This type of service works well with 3D printing, which is already in use at Lausanne University Hospital (CHUV)."

→ www.cish.ch



ICOSYS INSTITUTE / HEIA-FR

HELPINGS SMES AND EDUCATION CAPITALIZE ON BIG DATA

DAPLAB, which is based on the Fablab model (a community workshop of sorts) wants to make it easier for SMEs and Fribourg's higher education providers to capitalize on big data. "In addition to providing them with the physical infrastructure, we offer researchers and companies a free coaching service on how to use and find value in their data. This is the first laboratory of its kind in Switzerland", explains Jean Hennebert, Joint Head of the Institute of Complex Systems, part of the Fribourg School of Engineering and Architecture (HEIA-FR). DAPLAB, which is a byproduct of a partnership between the Fribourg

business and academic communities, has already launched a series of projects. "They are all very different and deal with subjects as diverse as natural disaster forecasting, remote building management, DNA analyses and even milk and cheese production." DAPLAB backers include Fribourg University (UNIFR), the HEIA-FR, local companies and the canton.

→ daplab.ch
 → icosys.heia-fr.ch

SCHUMACHER AG



**BINDET TALENTE
RELIEUR DE TALENTE
BINDING TALENTE**

SCHUMACHER AG | Industriestrasse 1-3 | 3185 Schmitten
+41 (0)26 497 82 00 | info@schumacherag.ch | www.schumacherag.ch

www.saint-paul.ch

**CONSEIL | COMMUNICATION | CRÉATION GRAP
HIQUE | PHOTOGRAPHIE | RÉDACTION | CORRE
CTION | COURTAGE ANNONCES | PRÉPRESSE IT
ECHNOLOGIE NUMÉRIQUE | MAILINGS | IMPRES
SION OFFSET | IMPRESSION NUMÉRIQUE | APPR
ÊT | LOGISTIQUE | ENTREPRISE | GÉNÉRALE | DE
COMMUNICATION | GENERAL UNTERNEHMEN
FÜR | KOMMUNIKATION | BERATUNG | KOMMUN
IKATION | GRAFISCHE GESTALTUNG | FOTOGRA
FIE | REDAKTION | KORREKTORAT | INSERATEVE
RMITTLUNG | DRUCKVORSTUFE | NEUE MEDIEN
| MAILINGS | OFFSET DRUCK | DIGITAL DRUCK | W
EITERVERARBEITUNG | LOGISTIK**



Saint-Paul
Imprimerie Druckerei

UNE ENTREPRISE DU GROUPE SAINT-PAUL | EIN UNTERNEHMEN DER GRUPPE SAINT-PAUL

USEFUL ADDRESSES

BUSINESS START UPS AND CONSULTING

Fribourg Development Agency
Bd de Pérolles 25,
P.O. Box 1350, 1701 Fribourg,
T +41 26 304 14 00, www.promfr.ch

Fri Up - SME Start-up Support
Passage Cardinal 1,
P.O. Box 235, 1705 Fribourg,
T +41 26 425 45 00, www.friup.ch

platinn - innovation platform
Rue de Romont 33,
P.O. Box 1205, 1701 Fribourg,
T +41 26 347 48 48, www.platinn.ch

blueFACTORY - Innovation Quarter
Passage Cardinal 1, 1700 Fribourg,
T +41 26 422 37 09, www.bluefactory.ch

Marly Innovation Center (MIC) - Technology Center
Rte de l'Ancienne Papeterie,
1723 Marly, T +41 26 435 31 50,
www.marly-innovation-center.org

Le Vivier - Technology Park
Z.I. du Vivier 22, 1690 Villaz-St-Pierre,
T +41 26 653 72 00, www.vivier.ch

Office 37 - Business Center
c/o CCIF, Rte du Jura 37 B,
P.O. Box 304, 1701 Fribourg,
T +41 26 347 12 20, www.office37.ch

FINANCE AND VENTURE CAPITAL

Venture Capital Fribourg Ltd
c/o Development Agency,
Bd de Pérolles 25, P.O. Box 1350,
1701 Fribourg, T +41 26 304 14 00,
www.capitalrisque-fr.ch

Seed Capital Fribourg Foundation
P.O. Box 1350, 1701 Fribourg,
T +41 26 304 14 14, www.seedcapital-fr.ch

Cautionnement romand (Loan Guarantee Association)
Cautionnement Fribourg, 1700 Fribourg,
T +41 26 323 10 20, www.crcpme.ch

New Regional Policy - NRP
c/o Development Agency,
Bd de Pérolles 25, P.O. Box 1350,
1701 Fribourg, T +41 26 304 14 00,
www.innovationregionale.ch

RESEARCH AND TECHNOLOGY TRANSFER

Technology and Knowledge Transfer Fribourg
c/o Adolphe Merkle Institute,
Ch. des Verdiers 4, 1700 Fribourg,
www.tt-fr.ch

Adolphe Merkle Institute and Fribourg Center for Nanomaterials
Ch. des Verdiers 4, 1700 Fribourg,
T +41 26 300 92 54, www.am-institute.ch

Innosquare - Competence Centers (ROSAS, DPCC, PICC)
Passage du Cardinal 1,
1700 Fribourg, T +41 26 429 66 56,
www.innosquare.com/cc/home

Innosquare Clusters (Swiss Plastics, Energy & Building, Food & Nutrition)
Passage du Cardinal 1, 1700 Fribourg,
T +41 26 429 66 52, clusters.innosquare.com

Swiss Integrative Center for Human Health
Passage du Cardinal 13B, 1700 Fribourg,
T +41 26 300 65 01, www.sichh.ch

EDUCATION

University of Fribourg
Av. de l'Europe 20, 1700 Fribourg,
T +41 26 300 71 11, www.unifr.ch

School of Engineering and Architecture of Fribourg
Bd de Pérolles 80, P.O. Box 32,
1705 Fribourg, T +41 26 429 66 11,
www.heia-fr.ch

School of Management Fribourg
Ch. du Musée 4, 1700 Fribourg,
T +41 26 429 63 70, www.heg-fr.ch

School of Health Fribourg
Rte des Cliniques 15, 1700 Fribourg,
T +41 26 429 60 00, www.heds-fr.ch

School of Social Work Fribourg
Rue Jean-Prouvé 10, 1762 Givisiez,
T +41 26 429 62 00, www.hets-fr.ch

EPFL Fribourg - Smart living lab
Passage du Cardinal 13B, 1701 Fribourg,
T +41 21 693 51 82, fribourg.epfl.ch

bioFactory Competence Center (BCC)
Passage du Cardinal 1, 1700 Fribourg,
T +41 79 933 15 60, www.bcc.ch

international institute of management in technology (iimt)
Bd de Pérolles 90, 1700 Fribourg,
T +41 26 300 84 30, www.iimt.ch

Vocational Education
c/o SFP, Derrière-les-Remparts 1,
1700 Fribourg, T +41 26 305 25 00,
www.edufr.ch

Les Roches-Gruyère
University of Applied Sciences
Rue de l'Ondine 20,
1630 Bulle, T +41 26 919 78 78,
www.lrguas.ch, www.glion.edu

BUSINESS ASSOCIATIONS

Fribourg Chamber of Commerce and Industry
Rte du Jura 37 B, P.O. Box 304,
1701 Fribourg, T +41 26 347 12 20,
www.ccif.ch

Fribourg Employers' Association
Rue de l'Hôpital 15, P.O. Box 1552,
1701 Fribourg, T +41 26 350 33 00,
www.unionpatronale.ch

Fribourg Industrial Group
c/o CCIF, Rte du Jura 37 B,
P.O. Box 304, 1701 Fribourg,
T +41 26 347 12 34, www.gif-vfi.ch

Fribourg International Association of International Companies
c/o CCIF, Rte du Jura 37 B,
P.O. Box 304, 1701 Fribourg,
T +41 26 347 12 31,
www.fribourg-international.ch

CONVENTION CENTERS

Forum Fribourg - Expo Centre Ltd
Rte du Lac 12, P.O. Box 48, 1763
Granges-Paccot, T +41 26 467 20 00,
www.forum-fribourg.ch

Espace Gruyère Ltd
Rue de Vevey 136-144, P.O. Box 460,
1630 Bulle 1, T +41 26 919 86 50,
www.espace-gruyere.ch

OTHER

Official Website of the State of Fribourg
www.fr.ch

Websites for Expatriates Living in the Canton of Fribourg
www.expats-fribourg.ch
www.expatsconnections.ch
(Expat Connection Fribourg)
www.fewgroup.org
(Fribourg Expat Women's Group)

Union fribourgeoise du tourisme (Fribourg Tourism Association)
Rte de la Glâne 107, P.O. Box 1560,
1701 Fribourg, T +41 26 407 70 20,
www.fribourgregion.ch

INDEX OF QUOTED COMPANIES

Bcomp Ltd	Fribourg	www.bcomp.ch	p. 25
BioFactory Competence Center Ltd	Fribourg	www.bcc.ch	p. 5
Bluefactory Fribourg-Freiburg SA	Fribourg	www.bluefactory.ch	pp. 5, 19, 31, 67, 71
CISEL Informatique SA	Matran	www.cisel.ch	p. 21
Climate Services SA	Fribourg	www.climate-services.ch	p. 19
DARTFISH Ltd	Fribourg	www.dartfish.com	p. 53
dashcom Ltd	Fribourg	www.dashcom.ch	p. 67
DATAMED SA	Villars-sur-Glâne	www.datamed.ch	p. 23
Dell Technologies	Texas, Etats-Unis	www.delltechnologies.com	pp. 8, 9
eb-Qual Ltd	Givisiez	www.eb-qual.ch	p. 45
Edy Toscano AG, Engineering & Consulting	Villars-sur-Glâne	www.toscano.ch	p. 55
Fookes Software SA	Val-de-Charmey	www.fookes.com	p. 39
Frewitt Engineering Works Ltd	Granges-Paccot	www.frewitt.com	pp. 11, 29
Fribourg Cantonal Bank	Fribourg	www.bcf.ch	p. 24
ftth fr SA	Granges-Paccot	www.ftth-fr.ch	p. 66
Geberit Fabrication SA	Givisiez	www.geberit.ch	p. 17
hymexia Sàrl	Châtel-Saint-Denis	www.hymexia.ch	p. 51
IMTF-Software Ltd	Givisiez	www.imtf.com	p. 25
JESA SA	Villars-sur-Glâne	www.jesa.com	p. 27
Laurastar SA	Châtel-Saint-Denis	www.laurastar.ch	p. 37
Liip Ltd	Fribourg	www.liip.ch	p. 39
Marly Innovation Center Sàrl	Marly	www.marly-innovation-center.org	pp. 5, 31
media f SA	Fribourg	www.media-f.ch	p. 51
Morphean Ltd	Granges-Paccot	www.morphean.ch	p. 53
OLF SA	Corminbœuf	www.olf.ch	p. 63
Phonak Communications Ltd	Courgevaux	www.phonak-communications.com	pp. 5, 11, 19
PMFch SA	Neyruz	www.pmf-system.ch	pp. 11, 31
Samvaz SA	Châtel-Saint-Denis	www.samvaz.ch	p. 11
SCOTT Sports SA	Givisiez	www.scott-sports.com	p. 5
Scout24 Switzerland Ltd	Wünnewil-Flamatt	www.scout24.ch	p. 21
SeedIMPULSE, Durante & von Siebenthal	Fribourg	www.seedimpulse.ch	p. 37
Sept.ch SA (Sept.info)	Villars-sur-Glâne	www.sept.info	p. 59
Setza SA	Fribourg	www.roomz.io	pp. 11, 61
Sqooba AG	Fribourg	www.sqooba.io	p. 63
SICHH Swiss Integrative Center for Human Health SA	Fribourg	www.cish.ch	pp. 5, 65, 71
SLX Swiss Learning Exchange SA	Planfayon	www.swisslearningexchange.com	p. 67
Swisscom Ltd	Berne	www.swisscom.ch	p. 69
TECHNORD SWITZERLAND SA	Fribourg	www.technord.com	p. 31
Transports publics fribourgeois Holding (TPF) SA	Fribourg	www.tpf.ch	p. 49
ViDi Systems SA	Villaz-Saint-Pierre	www.vidi-systems.com	pp. 11, 55
Vivier SA	Villaz-Saint-Pierre	www.vivier.ch	p. 5
WAGO Contact Ltd	Belmont-Broye	www.wago.ch	p. 33

ADVERTISERS

p. 22 et 60, AMAG SA, Fribourg / p. 54, Banque Credit Suisse SA, Fribourg / p. 60, Banque Privée Edmond de Rothschild SA, Fribourg / p. 12, Banque Raiffeisen, Fribourg / p. 36, Banque VALIANT, Fribourg / p. 10, BERNINVEST Implemia, Fribourg / pp. 46-47, Bluefactory Fribourg-Freiburg SA, Innovation and Technology Park, Fribourg / p. 38, Bulliard SA, Granges-Paccot / p. 20, CISEL Informatique SA, Matran / p. 2, CORE Partners, Fribourg / p. 36, Créambule Sàrl, Arconciel / p. 68, Covestro, Fribourg / p. 7, Development Agency, Fribourg / p. 76, ECAB, Granges-Paccot / p. 54, Edy Toscano AG, Fribourg / p. 52, Espace Gruyère Ltd, Bulle / p. 62, Fiduconsult Ltd, Fribourg / p. 28, Frewitt Engineering Works Ltd, Granges-Paccot / p. 78, Fribourg Cantonal Bank, Fribourg / p. 38, Geberit Fabrication SA, Givisiez / p. 50, Groupe E Ltd, Granges-Paccot / p. 40, Gugler Electronic AG, Marly / p. 44, HELVETICUM Inkasso SA, Fribourg / p. 26, JESA SA, Villars-sur-Glâne / p. 70, KPMG Ltd, Berne-Fribourg / p. 64, Liebherr Machines Bulle SA, Bulle / pp. 46-47, Marly Innovation Center Sàrl, Marly / p. 68, netplusFR SA, Bulle / p. 26, Progressia Fiduciary and Management Company Ltd, Fribourg / p. 28, Saia-Burgess Controls Ltd, Morat / p. 42, School of Engineering and Architecture of Fribourg, Fribourg / p. 30, School of Management, Fribourg / p. 72, Schumacher Ltd, Schmitzen / p. 52, SCOTT Sports SA, Givisiez / p. 20, Scout24 Switzerland Ltd, Wünnewil-Flamatt / p. 70, SICHH Swiss Integrative Center for Human Health SA, Fribourg / p. 72, St-Paul Imprimeries et La Liberté Médias SA, Fribourg / p. 77, Steiner SA, Berne / p. 44, Transports publics fribourgeois (TPF) SA, Fribourg / p. 22, UCB Farchim Ltd, Bulle / p. 62, Union fribourgeoise du Tourisme, Fribourg / p. 18, University of Fribourg, Fribourg / pp. 46-47, Vivier SA, Villaz-Saint-Pierre / p. 32, WAGO Contact Ltd, Domdier

PHOTO CREDITS

Charly Rappo, arkive.ch: p. 27, p. 43, p. 49, p. 59, p. 66 (right), p. 69 / Nicolas Zeller, www.flouartistique.ch: p. 8 / Alain Wicht, La Liberté: p. 17, p. 24 (left), p. 31

P. 3, State of Fribourg / p. 5, State of Fribourg & Development Agency / p. 11, Development Agency / p. 13, DR / pp. 14-15, Fotolia / p. 19, Phonak Communications / p. 21, CISEL Informatique / p. 23, DATAMED / p. 24 (right), Cyrill Eltschinger / p. 25, Bcomp / p. 29, Frewitt / p. 33, WAGO Contact / pp. 34-35, Fotolia / p. 37, Laurastar / p. 39, Liip / p. 45, Fribourg-Freiburg Challenge © Laurent Sciboz / p. 48 (left), Philippe Cudré-Mauroux / p. 48 (right), Laurent Sciboz / p. 51, Fotolia / p. 53, Morphean / p. 55, ViDi Systems / pp. 56-57, Fotolia / p. 61, Setza / p. 63, OLF / p. 65, Fotolia / p. 66 (left), Pony del Sol / p. 67, SLX Swiss Learning Exchange / p. 71, SICHH Swiss Integrative Center for Human Health

COLOPHON

FRIBOURG NETWORK ASSOCIATION,

c/o Fribourg Development Agency,
Bd de Pérolles 25, P.O. Box 1350,
CH-1701 Fribourg

EDITORIAL COMMITTEE

Jean-Luc Mossier,
President, Fribourg
Development Agency

Christoph Aebischer,
Fribourg Development Agency

Marie-Céline Coen,
Fribourg Image Promotion

Anne Maillard,
Banque Cantonale de Fribourg

Jean-Nicolas Aebischer,
School of Engineering
and Architecture of Fribourg

Jacques Boschung,
Dell Technologies

Vincent Bifrare,
mondays.ch

Nando Luginbuhl,
Ministry of Economic Affairs

Christophe Nydegger,
Cantonal Vocational Education
and Training Service

Grégoire Raboud,
Fribourg Chamber of
Commerce and Industry

Nicolas Stevan,
eikon

MANAGING EDITOR
Philippe Crausaz
Crausaz & Partenaires SA
CH-1763 Granges-Paccot

CHIEF EDITOR
Frank-Olivier Baechler
CH-1700 Fribourg

AUTHORS
Frank-Olivier Baechler
Patricia Michaud

TRANSLATIONS

Barbara Horber and Elaine Sheerin
from Transit TXT SA

CONCEPT & DESIGN

nuance, CH-1700 Fribourg

AD SALES

Fribourg Network Advertising
Arnold Krattinger

PRINT

Imprimerie St-Paul SA,
CH-1705 Fribourg

© 2017 FNF, annual release
All rights reserved.



En cas d'incendie,
appelez le...



L'ECAB' attitude!



ECAB
KGV

www.ecab.ch



NETWORKING OUR SKILLS – ADDING VALUE

As one of Switzerland's leading total (design-and-build) and general contractors, we use every opportunity to network our skills, minimise interfaces and promote cooperation.

To this end, we continuously check all the relevant parameters – performance, quality, costs and timeframes – for potential improvements and savings. To ensure that every project generates sustainable benefits. For all stakeholders.

**NOUS SOUTENONS
L'ESPRIT D'ENTREPRISE.**

**WIR UNTERSTÜTZEN
DEN UNTERNEHMERGEIST.**

**WE SUPPORT
ENTREPRENEURSHIP.**

