

# JUMP RIGHT IN

ENERGETIC AND GROWING JYVÄSKYLÄ

# ROBUST GROWTH AND HIGHLY QUALIFIED EXPERTS

- Fast economic growth started in Jyväskylä and Central Finland earlier than in the rest of the country in 2016
  - Jyväskylä region +6.0%
  - Rest of Finland +6.1% (aggregate corporate revenue in 2017)
- An active and international business environment with solid expertise; a total of 10,000 companies in the region
- Strongest growth in expert services, followed by exports (e.g. Valmet and Moventas)
- Highly trained workforce; Jyväskylä University, University of Applied Sciences; 42,000 students
- Major investments by the city: Kangas, Hippos and Kukkula offer unique opportunities for companies





# EXPERTS AVAILABLE FOR COMPANIES

- In Jyväskylä, 35,3 % of the population holds a higher educational degree

## **University of Jyväskylä**

- 13,760 students
- Faculties: Faculty of Humanities and Social Sciences; Faculty of Information Technology; Faculty of Education and Psychology; Faculty of Sport and Health Sciences; Faculty of Mathematics and Science; School of Economics
- 9 centres of excellence in research designated by the Academy of Finland

## **Jyväskylä University of Applied Sciences JAMK**

- 8,000 students
- 8 fields of study, primarily social services and health, energy and technology and business administration.
- Team Academy, a centre of excellence for entrepreneurship, has been operating in Jyväskylä for 25 years. The concept has been exported to over 10 countries.

# ICT AND CYBER SECURITY

- The Faculty of Information Technology in Jyväskylä is the 3<sup>rd</sup> largest in the country
- Faculty has 2,600 students and 175 post-graduate students. Every year 125 students graduate with a BA and 115 with an MA degree. The numbers are increasing.
- Conversion training for Master of Engineering degrees commenced in Jyväskylä.
- Teaching and research staff 140, of whom 22 are professors.
- The Jyväskylä University of Applied Sciences trains engineers and bachelors of business administration for the ICT industry.
- A total of 120 ICT engineers graduate on a range of programmes every year.
- The Jyväskylä University of Applied Sciences and Jyväskylä University also offer cyber security training.





# BIGGEST ICT EMPLOYERS IN JYVÄSKYLÄ

TeliaSonera Plc	370
Tieto Corporation	256
Landis+Gyr	249
Dna Oy	196
Qvantel Finland Oy	175
Solteq Oy	162
Protacon (Group)	154 (Software approx. 90)
Digia Oy	141
Inmics	117

# ICT COMPANIES ON THE RISE

- **Gofore**, Finland's best and Europe's second best workplace, was established in Jyväskylä in 2016. Currently, the company employs 25 specialists in the city.
- **Nordcloud**, Europe's fastest growing provider of cloud services, is expanding in Jyväskylä and hiring dozens of new employees.
- **Paytrail**, an online payment company with the most comprehensive range of services in the market, was founded and continues to grow in Jyväskylä. Purchased by Nets in 2017.





# FINLAND'S SPORTS CAPITAL

- Jyväskylä is Finland's leading centre for sports, health and wellbeing expertise.
- All key research organisations and academic programmes are based in Jyväskylä
- Innovative companies, such as Firstbeat, Emfit, Evogenom, Fysiocenter; new ones are being encouraged to relocate to Jyväskylä.



# INTERNATIONAL EXPERTISE

- Leading expertise particularly in the following areas:
  - nerve-muscle research
  - health sciences
  - health effects of physical exercise and ageing
  - promotion of health
- Jyväskylä is host to Finland's only gerontological research unit and a university-level training centre for specialists in physical exercise.
- Its special strength is the provision of research-based services and solutions for learning, physical exercise and wellness.



## BODY ANALYTICS FOR SPORTS AND WELL-BEING

- Established 2002 as a spin-off from Research Institute for Olympic Sports and University of Jyväskylä, Finland
- Based on 20 years of research and experience in heartbeat and heart rate variability
- Firstbeat has created a unique digital model of the physiology that turns heartbeat data into personal feedback
- We bring near laboratory accuracy and technology used by professional athletes to everyone



# FIRSTBEAT ANALYTICS IN THE MARKET

- Professional Sports

22 000 athletes worldwide use Firstbeat Solutions.



- Consumer Products

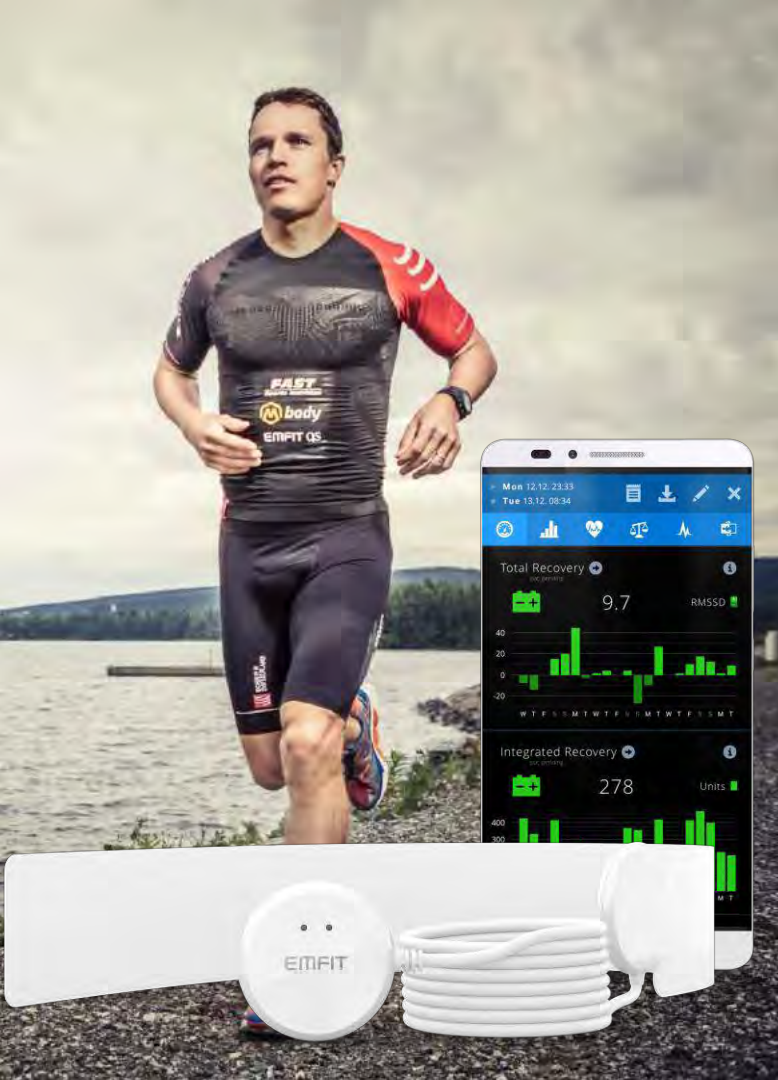
Firstbeat is the leading licensor of heartbeat analytic technology. Firstbeat innovations integrated into over 75 consumer devices.



- Wellness Services

Firstbeat lifestyle analysis solution is used by 400 health care providers around Europe and in the UK to support employers such as





# Healthcare Emfit

Emfit

The world pioneer and leading manufacturer of health and sleep sensors based on ballistocardiography.

**Product/Service:** Fully automatic under mattress sensor and whole-night HRV for recovery and stress analysis for customers like: health conscious & active consumers, professional athlete and coaches.

Contact-free measuring for whole night heart-rate-variability, heart and breathing rates, autonomous nervous system balance, sleep quality and sleep time movement activity.

EMFIT®

BUSINESS > JYVÄSKYLÄ



# OUR SOLUTION

Emfit

## Autonomous and automatic contact-free health monitor

EMFIT QS measures heart and breathing rate, heart-rate-variability, sleep stages and movement activity in real time. It also provides heart beat and breathing waveform for diagnosing of obstructive sleep apnea or atrial fibrillation.

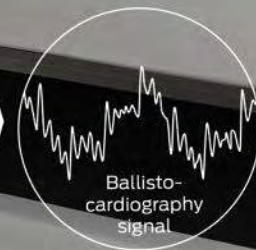
All this from simply from bed, installed under the mattress. It works automatically and autonomously over the Internet without needing a paired phone for its operation.



Wi-Fi OR  
CELLULAR MOBILE  
DATA



UNDER MATTRESS  
SENSOR



Web application enables customers to access the data with browser.

Two women are exercising on a park bench. One woman is wearing a light blue tank top and dark blue leggings, while the other is wearing an orange jacket and dark pants. They are both leaning forward, holding onto the metal bars of the bench. The background shows a clear blue sky and some outdoor equipment.

# EVOGENOM – LET YOUR GENES SPEAK TO YOU

- Extensive gene tests available for all
- Evogenom Oy is a Finnish biotechnology company. The company makes extensive and reliable gene tests available for all.
- Gene tests are an easy way to get to know more about your genotype.
- Evogenom operates in Jyväskylä, and our company has been awarded the Key Flag Symbol.

[info@evogenom.com](mailto:info@evogenom.com)

BUSINESS > JKL



## Physical exercise

No more generalised training programmes. Information about hereditary strengths and challenges assists training and choice of sport.



## Diet

Information about personal characteristics improves diet planning  
No more mistakes in diet choices.



## Well-being

Know your injury and health risks through gene data.  
Know yourself better - feel better.



# IBM WATSON HEALTH CENTER OF EXCELLENCE

- IBM is engaged in advanced competence-building and innovation activities in conjunction with the Jyväskylä University Faculty of Information Technology (Watson Health Center of Excellence) to develop new healthcare services based on artificial intelligence.
- Jyväskylä University possesses unique expertise in the education and research of cognitive data processing skills which IBM draws upon to generate added value for its operations.
- Jyväskylä is the only university in Finland to harness the Watson system to analyse IBM's data.
- All in all, there are some 100 specialists in Jyväskylä working on the Watson project.



# IBM INNOVATION HUB

- Project activities including accumulation and improvement of technical expertise
- Consolidation of the IT company network and intensification of cooperation
- Enhancing national coordination and exchange of information
- Seminars on breakthrough technologies: IoT, Artificial Intelligence, AI Computing, Cyber Security
- Courses on Watson technology in collaboration with the university; training for new AI specialists
- Watson Health Cloud Finland project exploring the suitability of cognitive data processing technology for development and innovation in the Finnish healthcare sector.
  - As part of this project, a closed computing environment for processing social services and healthcare data has been created at Jyväskylä University.





# Hippos2020 – Number one center for Nordic sports



# NUMBER ONE CENTER FOR SPORT AND WELL-BEING IN NORDICS HIPPOS2020

- Hippos2020 will take Finnish sport to the 2020s
- Unique – Urban – A world-class centre
- First-rate facilities for everyone, from top athletes to casual exercisers, investment of 200 MEUR
- The First-class business and research ecosystem of well-being knowhow, smart technologies and services

# FIRST-RATE FACILITIES



- New **multiarena** and **practice stadium** for ice events
- New **indoor sports centre** for over 20 events from combat sports to ball games and athletics
- New **gymnastics centre**
- **Football stadium** with a retractable roof
- **Coaching centres** for football, motor sports and eSport
- **Jyväskylä Sports Academy Coaching Centre:** over 800 athletes and dozens of events
- **Ice hockey testing and measuring rink** for practicing shots and skating
- **Training Room concept** for research and realisation of optimum rest-and-recovery for various events
- **International urban coaching centre** (e.g. athletics, gymnastics, ball games, combat sports, eSport, motor sports)
- Activity and **exercise park** for people of all ages
- **Outdoor fields** with freezing and thawing equipment

# CENTRE FOR RESEARCH, TESTING AND TRAINING EXERCISE

University of Jyväskylä,  
Faculty of Sports and  
Health Sciences (PE  
teachers, coaches,  
researchers, biomechanics,  
health science)



Research Institute  
for Olympic Sports  
'KIHU'



jamk.fi

Jyväskylä University of Applied  
Sciences JAMK, Sport Business  
School



Research centre of the Foundation  
for Sport and Health Sciences 'LIKES'

**Exercise experimentation and  
development platform Eureka** for  
identifying best practices for improving  
children's motor skills in collaboration with the  
Faculty of Sport and Health Sciences of  
Jyväskylä University

# EXAMPLE: HIPPOS2020 – INTERNATIONAL URBAN COACHING CENTRE FOR ELITE SPORTS

## **Strengths:**

Top-of-the-line performance locations and equipment for sports activities, maintenance training, recovery, measuring...

Hippos2020 –complex: everything in one place, from accommodation to maintenance, training, recovery

## **Objective:**

To achieve the Olympic training centre status for the centre.

To raise the setting and expertise to an international level

To have international training camps in Jyväskylä

# ESPORTS IN URBAN HIPPOS

22

11.6.2018

- **Facilities will be compatible with eSport standards and requirements will be built in the Hippos2020 complex and multifunctional arena**
- **eSport specific training center is being planned to be included in the Hippos complex by 2023.**
- **There is a growing need for eSport specific research and testing**
- **eSport and traditional sports coaching are getting closer to each other in a rapid phase. Hippos2020 the “flag-bearer”.**

# EDUCLUSTER FINLAND LTD.



**5000+**

educational experts

**100+**

permanent employees

**200+**

international projects

**30+**

countries

**I**

priority: You

- **Pioneering Finnish education expertise globally**
- leads in developing inspirational and thriving learning communities
- builds a sustainable education model with the client
- continuously developing know-how in close cooperation with owner organisations, the [University of Jyväskylä](#), [JAMK University of Applied Sciences](#), and [Jyväskylä Educational Consortium Gradia](#)

# ECF SERVICES:

- **Full-scale ECF School**
  - a full-scale Finnish school, Educluster can set up an ECF School in your region, that uses the Finnish curriculum framework, fused with local guidelines and regulations.
  - The school is planned in close cooperation with the client and carry the responsibility of making it a functional unit.
  - Teaching at the school is carried out by both Finnish teachers and local teachers trained by us.
- **School with the ECF Approach**
  - the Finnish education concept to complement an existing educational path in local school.
  - to implement local curriculum through the use of Finnish teaching and learning practices.
  - support to developing local school and monitoring its quality, all the while training local teachers to become experts in Finnish pedagogy.
- **Teacher education and training**
  - train international educators to become experts in Finnish pedagogy,
  - training, degree courses, and professional qualifications for groups in collaboration with owner organisations





## Case: Qatar–Finland International School in Doha

### Q.F.I. School 2017–2018

- Grades 0–8
- Students 750
- Staff 86 (100+ with outsourced staff)
- People: Students from 60+ different nationalities, staff from 19 different nationalities, 50% of staff Finnish
- Localised Finnish curriculum





# Pisara®

The world's most intelligent water management

[www.pisara.com](http://www.pisara.com)

# Pisara – water operator

Jyväskylä Energy Group's mission is to create conditions for the well-being of customers, by providing intelligent solutions for energy and water production, distribution and use.

## Facts & figures

- number of employees: approx. 260
- annual turnover: approx. €195M
- water business: €45M
- metered water usage locations: >18 000
- water users: 130 000
- water production units: 8
- water towers: 11
- water supply network: approx. 2000km
- pump and pressure stations: >350
  - ✓ all with 24/7 remote monitoring
- 14 water cooperatives

# Pisara®?

**Pisara brings together tried and tested technology, the latest innovations and Finnish water knowledge, in one comprehensive service package**

Pisara places the latest water management applications and know-how at the disposal of municipalities and cities

Pisara ensures the optimization of risk- and asset management, operational reliability and cost effectiveness

**Pisara ensures that threats do not become crises**

# BUSINESS > JYVÄSKYLÄ

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