

Λευκωσία 14.4.2016

Προς: Όλα τα Μέλη

Από: Τμήμα Υπηρεσιών και Εμπορίου

Κυρίες, Κύριοι,

Συνημμένα σας αποστέλλεται το προφίλ εταιρειών της Ουγγαρίας που ενδιαφέρονται να συνεργαστούν με την Κύπρο.

Παρακαλούνται οι ενδιαφερόμενοι να επικοινωνούν απευθείας με τις εταιρείες.

Με εκτίμηση

Χρίστος Πετσίδης

Διευθυντής Υπηρεσιών και Εμπορίου



### CIVITA FOOD LTD.

Pasta, oils and fodder

### Our products and services

- Corn-based polenta, cornidge, flour and pasta
- Cold-pressed corn oil
- Extruder, corn flake and brewery grits
- Corn germ press cake

# The best of corn, sustainable health

### Our value proposition

Civita is an innovative, customer-centered company that supplies high-quality products and services, exceeding our customers' expectations. We offer a range of foods that are nutritious, delicious and practical. With our gluten-free corn products, a healthy lifestyle is simple and rich in flavor.

Corn is rich in fibre, B-complex vitamins, antioxidant carotenoids, folate, niacin, and thiamin, in particular, abundant in phosphorus and is a natural source of magnesium, iron, zinc, and ferulic acid. We use the best GMO-free, chemical-free and gluten-free, Hungarian corn.

### Who we are

Civita Food Ltd. and Agri Corn Ltd. were founded in 1992 as a family business. We are a Hungarian leader in the corn industry supporting more than 200 corn-farming families.

Our oil-press plant and corn mill manufacture stock for the food industry (brewing, corn flake production, breakfast cereals, child nutrition) as well as the pharmaceutical and pet food industries.

The latest result of our product innovation is a cutting-edge corn oil-presser, capable of producing 3,000 tons of oil each year.

### Our work

Our company has received accolades by the Hungarian Academy of Sciences and we have won several awards for our innovation and products.

Our product line is sold in the European Union, Russia and Belarus.

Civita uses strict quality control, complies with ISO standards and meets the requirements of the IFS system.

# CIVITA

### **CORN PASTA**

Civita gluten-free pasta is made of naturally gluten-free ingredients suitable for the gluten sensitive and health conscious customers.

### CORN OIL

A GMO-free, chemical-free, 100% pure and unrefined cold pressed oil rich in flavour and in cholesterol lowerering phytosterols and polyunsaturated fats.

### **FLOUR**

Corn flour is the finely powdered cornmeal, high in fibre, which thickens any sauce or soup and adds flavour to your pancakes, biscuits or bread recipe.

### **CORN GRITS**

Prepared in different granulate sizes and qualities as raw material for corn flakes or as replacement for traditional hop or barley in the brewery industry.

### **FODDER**

Our new product, the corn germ press cake is oil compressed and used for fodder, fish food or dog biscuits. Our products are available in various packaging options and sizes.



LUTEN FREE



MO RFF



CHEMICAL



DIARY









EGG FREE

Our products are available in various packaging options and sizes.

### DETKI KEKSZ LTD.

### Confectionary

### Our products and services

- -Organic biscuits for babies
- -Animal shaped biscuits for kids
- -Biscuits for on-the-go teens and hikers
- -Diabeticfriendly products
- -Cereal biscuits
- -Fairy tale honey linzers
- -Tere-Fere family soft biscuits
- -Household biscuits
- -Single packed biscuits
- -Crackers
- -Chips

### 66 Detki –Always agood choice 55

### Our value proposition

Our mission is to develop high quality products at a reasonable price, driven by our commitment to healthy nutrition.

Our customer focus allows us to meet individual customer requests in taste, size and packaging.

Our employees work together as team to ensure that we meet the highest food safety standards, create the highest quality products and ensure continuous improvements and innovation.

### Who we are

Detki Keksz Ltd is a Hungarianowned company established in 1983, focused on the production of highquality biscuits. With three decades as a dominant player in the domestic confectionary industry, today, Detki is a Hungarian household name.

With more than 140 employees, we are proud to offer a growing line of healthy and nutritious biscuit choices including certified organic, vitamin enhanced and diabetic friendly biscuits.

### Our work

We currently deliver in Hungary and Central Europe as well as in Asia and the Arab world. We are working on expanding our distribution.

Our products have received various quality, innovation and brand awards.

The company is certified according to Hungarian and EU (HACCP) as well as International (IFS) food processing norms and our organic products are tested and certified

### www.detkikeksz.hu



### **ORGANIC BISCUITS**

For the healthy diet. Our products are made from organic ingredients for all ages: our organic baby biscuits are a dapted to infants' needs from 6 months on.

### **CRACKERS**

For those in favour of salty tastes, we offer an assortment of the most popular tastes with our Detki brand. Our crackers are the best choice for a movie night or a party, but also a favourite to be included in your picnic basket.

### CHILDREN'S CRACKERS

For playful children full of energy. Our popular animalshaped biscuits are now available in salty version, as crackers, in cheese and ketchup flavours. The product does not contain any flavour enhancers or artificial colourings.

### LURKÓ BISCUITS

For the evermoving student. Biscuits enriched with vitamins and minerals. Your best friend when hiking or on the playground. We offer milk, cocoa and whole grain versions

### FAIRY TALE HONEY LINZERS

The traditional biscuit. In addition to the highly popular dipped dark and milk choclate "fairy tale" varieties, we are now also offering applecinnamon and orangeginger versions, perfect for consumption throughout the year but an ideal holiday biscuit.

### OAT BISCUITS

Our popular "Oat dream" products are available as bars and in a number of flavours, so they are always at hand whether you're hiking, working at the office or at school. These biscuits feature a trendy design symbolizing power and energy.

### DIABETIC-FRIENDLY BISCUITS

The sweet taste of a biscuit without the sugar for those with diabetes. Three flavour varieties ensuremthat everyone has a favourite! Our packaging outlines all productrelated information needed to ensure a suitable diabetic diet.

### **CHIPS**

Our new product from the oven. Chips fans now have the opportunity to taste this snack prepared by special technology in salty, cheese and sour cream and onion flavours. Our crackers are baked

in the oven with no oil used, in order for us to be able to offer them with reduced fat content.





# HUNGAROTEJFELDOGOZÓ LTD. ST. MARTONI CHEESE

**Dairy Products** 

### Our products and services

Semi-hard, moulded, Kashkaval cheese, pressed cheese, cream cheese, flavoured cheese rolls and Grillcheese



### Our value proposition

We concentrate on sourcing only the best quality raw materials. The high quality milk we use comes from strictly-controlled systems, including a dairy farm within our company.

Industry-best production practices and highest quality raw materials provide up to a 24 month shelf life for our cheeses.

### Who we are

St. Martoni is the brand of our cheese factory based in Kunszentmarton, Central Hungary. Our cheese factory processes 10 million litres of milk per year. The factory specializes in the production of semi-hard fat Kashkaval cheese.

Based on our technology and special recipes, we produce tasteful and high quality cheese based on hundreds of years of tradition.

In our product portfolio, there are also smoked Kashkaval cheese-rolls (with different flavours) and our newest product, Grillcheese.

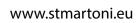
The knowledge and passion of our Cheese Masters guarantee the highest quality products.

#### Our work

Our cheese products are sold in the European Union and almost all of our Kashkaval cheese production is sold in the Gulf countries as private-label products.

Our company was awarded "2014 Cheese-Maker of the Year" in Hungary.

Our food production is certified by HACCP and our cheese is certified by the Jordan Food Authority, while our Grillcheese is patented.





- Kashkaval is a semi-hard moulded fat cheese with a characteristic-aromaticsalty flavour.
- The cheese is white or light yellow coloured and light brown when it is smoked
- It is easy to cut, grate and an excellent topping for many foods. Kashkaval is the most popular cheese in the Gulf region





- Smoked, semi-hard Kashkaval cheese with ham, or herb-kneaded cream cheese is rolled into a log shape, then packed into foil film and surrounded by bamboo sticks.
- It has a typical smoked cheese aroma with ham, or a deep herb flavour.

- A semi-hard cheese that can be fried in a pan or on the grill.
- The taste is milder than other grill or Halloumi cheeses, but the surface of it remains solid when fried, and turns a light brown colour in a few minutes.



### KAPOS TERNERO LTD.

### Fresh and frozen meat

### Our products and services

- Fresh and frozen red meat from calves, lambs, sheep and goats
- Sliced, deboned and packaged according to customer request
- Certified organic, kosher and halal meat

### 66 Reliability and Permanency 99

### Our value proposition

Kapos Ternero Ltd specializes in marketing of fresh and frozen veal, lamb and mutton meat, as well as vacuum packed raw, sliced, and cubed meat.

We offer the capacity to slaughter, debone, pack and process organic meat to customer specifications including halal slaughtering.

To ensure high-quality standards, we hand-deliver our products to inland clients and ship our fresh, chilled, premium quality meats by aircraft for arrival within 72 hours.

### Who we are

Kapos Ternero Ltd was established in 1992. Since 1997, we have owned our own slaughterhouse. We specialize in the marketing of fresh and frozen veal, lamb and mutton meat as well as vacuum-packed raw, sliced and cubed meat.

We have the capacity to slaughter, debone, pack and process organic meat to customer specifications including halal slaughtering.

#### Our work

We currently export within the European Union, Japan and Switzerland. Due to our commitment to quality in meat sourcing and processing, we deliver to the gastronomy/restaurant, catering and hospitality industries and count among our clients some of the most awarded restaurants.

We operate according the HACCP Quality Insurance System and IFS. Our slaughtering process is certified by the Hungarian Islamic Community.



### LAMB PRODUCTS

are delivered vacuum-packed and cut to our customer needs.



# FRESH RED MEAT FROM SHEEP

can be delivered cubed or sliced as requested.



# RED MEAT FROM CALVES

can be deboned or prepared in various cuts and delivered in vacuum packaging as chilled or frozen food within 72 hours globally.







### PILZE - NAGY LTD.

### Fresh food and pastes

### Our products and services

- Fresh oyster mushrooms, black poplar mushrooms in different packaging.
- Organic fresh oyster mushrooms, organic black poplar mushrooms in different packaging.
- Canned products: VIA NATURALIS oyster mushroom pastes in different flavours.

66 PILZE-NAGY LTD. is the oyster mushroom grower Growing good mushrooms starts here – PILZE-NAGY Ltd. 99

### Our value proposition

Due to two decades of professional experience, and the prioritization of innovative, continuously ready-to-renew, environment-friendly development, Pilze-Nagy Ltd. is registered as a leading oyster mushroom growing an trading company in Hungary and Europe.

### Who we are

The Pilze-Nagy Ltd. has been working in the field of mushroom cultivation for 25 years. We produce substrate for oyster and poplar mushrooms, growing oyster and poplar mushrooms the distributing of fresh oyster mushrooms in wholesale and retail markets, and the generation of electric power and heat energy sourcing f rom biogas production. Pilze-Nagy Ltd.'s mushroom farming is in full compliance with the conditions and terms of organic mushroom production, being also officially certified by the Biokontroll Hungária Nonprofit Kft.

We have recently increased our focus on producing processed mushroom products, like oyster mushroom pastes and sliced and powdered dried mushrooms.

### Our work

Our customers are mainly wholesaling companies and supermarket chains. The most important market is Germany, but we sell significant quantities of mushrooms in the Austrian and French markets, while demands are increasing in neighbouring countries (Czech Republic, Slovakia, Romania and Poland) as well.

We offer our fresh products in all kinds of packaging including plastic trays (for supermarkets) and wooden boxes (catering). Freshness is one of our advantages. Our products are to our clients within 24 hours of harvesting, which is ensured by our own cooling truck fleet.

www.pleurotus.hu



# MUSHROOM - BIOGAS COMPLEX AGRISYSTEM

In this complex mushroom growing agrisystem, biogas production and agricultural crop production work in close cooperation.

All organic wastes from mushroom production (spent mushroom substrate) are utilized in a biogas plant in order to decrease the environmental footprint of the production and serve the sustainable environment.



Generated energy (heat and electricity) can be returned to mushroom growing. The residue of biogas production is a valuable organic fertilizer, which can be applied to fields where the straw for mushroom substrate is grown.

It is a good example of circular economy. Main materials (straw) are cycled, renewable energy production is involved, while fresh mushrooms are part of the healthy human diet and finally, value generation happens in each production step





## TOKAJ KERESKEDOHÁZ LTD

### **Premium Wine**

### Our products and services

### **TOKAJI ASZÚ WINES**

The taste of our aszú wines are as special as the process making them itself. The hand-picke bortytised berries are selected over a two-month period. At the end of harvest, they are added to the current vintage's base wine which has already been fermented or is fermenting at that point. The long maceration and fermentation takes place in stainless steel vats or barrels in our 5.5 km-long underground Szegi cellar. Here the wine is aged for at least 2.5 years but often longer. Aszú wines traditionally are aged in 136 to 350 litre barrels made of local oak. The elegance, richness, fruitiness of these wines have no equal. No wonder they carry the title of Wine of the Kings, King of the wines.

### **TOKAJI SZAMORODNI WINES**

The word "szamorodni" comes from the Polish language, meaning "as it grew". The term suggests that the healthy and shrivelled berries are processed together. The quality, the sweet or dry character of the wine, is determined by the proportion of shrivelled berries. It is aged in barrel for 2 years or more.

### **GRAND SELECTION TOKAJI WINES**

Selection o f our premium wines produced in different categories: dry, semi-dry, sweet w ines. Grapes are harvested from low-yielding vineyards. These wines reflect the unique character of the varied terroirs from all over the Tokaj Wine Region. Our prime sites are in the first class Szarvas, Kovágó and the highly-prized Szentvér vineyards.

### **TOKAJI LATE HARVEST WINES**

Part of Tokaj-hegyalja traditions is the making of Late Harvest wines. Thanks to the natural concentration of flavours, careful processing and state-of-the-art technology these wines preserve varietal character and complexity resulting in late harvest wines of the highest quality.

### TRADITIONAL TOKAJI WINES

Made from the traditional grapes of Tokaj picked fully ripe, matured in small Zemplén oak casks in rhyolitic tuff cellars. During the maturation process, these rich flavours integrate well and make a multi-layered, elegant wine with unique aromas.

66 The Beginning of a New Era 59

### Our value proposition

- we produce varietal Tokaji wines from dry to sweet from 1100 ha of vineyards
- we purchase high quality grapes from 1500 private growers living in the region
- our wines reflect the different terroirs of the Tokaj region



### Our work

The developments of recent years and the modern processing technology applied is worthy of the reputation of Tokaji wine and the Tokaj wine region, and is in line with our efforts to preserve the traditions of Tokaj-Hegyalja as well as ensure the outstanding quality of our wines.

#### Who we are

Tokaj Kereskedoház Zrt. is a national winery owned by the Hungarian state. As the largest winery of the over 300-year old historical Tokaj Wine Region, which has been on UNESCO's World Heritage List since 2002, it has been the primary preserver and guardian of Hungarian wine making traditions. Tokaj Kereskedoház has more than 50 years of wine making experience, which made it a key player in the life of the Tokaj-Hegyalja area throughout this period.

A multi-million euro investment project was launched at the company's Tolcsva site to build a temperature-controlled storage tank hall, a new bottling plant and the related infrastructure for the winery



The wine-making area is revived under the management of Károly Áts, and as a result the company has the opportunity to enter new markets by producing higher quality wines. In 2006, the American "Wine and Spirit" magazine gave his 1999 essence 100 points and this year he was elected "Oenologist of the Year" at Tokaj-Hegyalja.



www.crownestates-tokaji.com

### UNIVER PRODUCT PLC

Specialty food, jams and sauces

### Our products and services

Baby foods, ketchup, mustard, mayonnaise, aseptic tomato concentrates, jams, fruit juices and dressings

## "Taste of Hungary 55

### Our value proposition

The Univer brand is synonymous with traditional, great tastes you can always trust. Fresh, local and healthy produce are at the heart of our philosophy. Our focus is to provide high-quality, preservative-free foods, with ingredients that are sourced locally.

We use the latest cutting-edge technology to ensure our products can be enjoyed without any artificial flavours, colours or preservatives.

Our brand new factory is equipped with the latest high-tech machinery.

### Who we are

Since 1948, Univer has been creating delicious condiments, dressings and scrumptious sauces, making us as a trusted family favourite.

We have personal relationships with all of our growers and visit their farms regularly, so we can ensure that the ingredients used are only of the highest quality.

### Our work

Our products are enjoyed across Europe, the US and Canada and we are planning to expand our distribution in the coming years. We hope more and more people from around the world will be able to enjoy and share the magical tastes of Univer products.

We produce according to the highest food safety standards in Europe and we have IFS and HACCP certifications.

# Uniter

### NATURAL BABY FOOD

Our wide variety of baby food products offers a tasty and healthy selection for four phases of a child's development. All products are free of allergens, gluten, lactose, milk protein and do not contain any preservatives.

### **DRESSINGS**

With reduced oil content, Omega 3 and Omega 6 fatty a cids a nd f resh t aste, o ur d ressings a re a n indispensable addition to any salad. Our full-flavoured ketchup, mustard, mayonnaise are widely recognized as some o f the most popular in Hungary and contain zero preservatives.

### **SCRUMPTIOUS SAUCES**

Whether it is the juiciest fruits, the plumpest peppers, sweetest tomatoes or the freshest eggs, Univer carefully selects only the best Hungarian raw materials. The most popular paprika products are R ed G old p aprika c ream a nd E ros P ista h ot spice paprika on the Hungarian market. Made from excellent quality paprika, providing the flavour and colour of f resh p eppers to consumers throughout the year.

### TOMATO CONCENTRATES

Univer tomato concentrates contain 100% fresh tomatoes f rom H ungarian g rowers. O ur f acility i s Hungary's largest factory in this category. We offer aseptic tomato concentrates for industrial customers in barrel, for retail customers tomato juice, and canned tomato concentrates

### **JAMS**

Produced exclusively from Hungarian fruits, our jams a rep acked with delicious flavour, natural vitamins and some of them contains no added sugar. Available in ten flavours.













# OPTIGÉP LTD.

Harvesting equipment

### Our products and services

Manufacturing and selling of agricultural machines. Sunflower harvester adapters, corn harvester adapters, header transporters, grain pick-up and loader.

## OPTImal choice - save money and time!

### Our value proposition

OPTIGÉP Ltd. dominates 98 % of the Hungarian market in the area of good quality sunflower harvester adapters, corn harvester adapters, header transporters, grain pick-up and loaders.

#### Who we are

The company was formed in 1993, and is 100 % Hungarian owned. OPTIGÉP Ltd. developed its expertise through taking over agricultural machine production from companies that had been working at the plant since 1967.

Since the formation of our company, we have closed every financial year with a profit. Among our staff of 136 employees, we employ 5 development engineers and invest 8-10 % of our annual turnover in improving our existing products and in developing new products in order to keep up with the customer demand and to stay competitive in the market.

#### Our work

OPTIGÉP Ltd. dominates 98 % of the Hungarian market. Beyond the Hungarian market the company exports to the following countries: USA, Russia, Slovakia, Romania, Bulgaria, Austria, the Czech Republic, Serbia, Ukraine and Moldova.

OPTIGÉP Ltd. works in ISO 9001: 2008 Quality Assurance System. This system together with the professional skill of the employees provides the good quality of our products.



### SUNFLOWER HARVESTER ADAPTERS SERVE FOR THE HARVESTING OF THE FULLY MATURED SUNFLOWER

Our adapters are equipped with a special connecting frame, which provides quick coupling to any combine types.

Each row features a gathering chain providing smooth material flow to the rotary knife mechanism, creating a clean cut. Lightweight row dividers assembled with vibrating catch pans minimize shattering loss and provide smooth and uniform material flow to the gathering conveyor and

The low profile floating lifters minimize harvest loss even at lodged down crop conditions. The side panels of the adapter work as excellent row dividers eliminating loss or fall-out of the sunflower heads from the adapter at the side rows.

A simple, durable drive line with built-in safety clutch, eases maintenance and adds a high technical reliability.

### Advantages of the adapters:

- Minimum seed loss
- Easy handling
- Simple connectivity to the combine
- Minimum maintenance demand
- Low operating costs
- Quick and blocking-free material flow even under bad harvesting conditions
- High field performance



### CORN HARVESTER ADAPTERS SERVE FOR THE HARVESTING OF THE FULLY MATURED CORN

The frame is universal so the adapter is suitable for any kind of combine. Snapping rolls ensure efficient pull-down and make choppers more effective.

The corn adapters are strong structures with efficient performance and minimal maintenance. The adapters have double-sided drives and are driven from the feeder of the combine harvester via cardan shaft.

The snapping units and the gathering worm are driven by chains or aluminium gearboxes. To avoid overload, the gathering worm has a safety friction clutch and every snapping unit has a safety clutch. Simple, durable drive lines have a built-in safety clutch that results in ease of maintenance and high technical reliability. The chopper pulls down the remains of the stalks as well as the weed, which is found among the rows and spreads rubble on the stubble-field. After chopping, 90 % of the stalk remains are under the size of 6 cm.

### Advantages of the corn adapter:

- Corn harvest and chopping occur in the same pass
- Ease of operation
- Quickly detachable no tools required
- Ease of maintenance
- Low operational costs
- High field performance
- Central electromechanical snapping adjustment
- Special bearings of snapping rolls do not require daily maintenance
- -To avoid overload every snapping unit has safety
- By means of the built in shift gearboxes, the revolutions per minute of some headers is adjustable ±5% compared to the factory settings and depending on the harvesting conditions.

## **VOGEL & NOOT**

Tillage, seeding, plant protection

### Our products and services

- Ploughs
- Cultivators
- Compact disc harrows
- Subsoilers
- Seedbed combinations
- Packer

- Roller
- Rotary harrows
- Seed drills
- Shredders
- Field sprayers
- Wearing parts



### Our value proposition

We want to show our strength not only with powerful machines, but also with technical progress and services.

Our aims are to support our dealers and to contribute to agricultural success. In doing so, we want to be ahead of the field. Machines that save time thanks to easy handling, and have longer service lives thanks to their robust design and reduced wear and tear bring commercial success. Well-designed implements impress users with more functions. Users love their sleek design and enjoy working with them. The result is agricultural success. Vogel & Noot is your across-the-board supplier with high quality standards in professional soil cultivation. We place additional focus on 'precision farming'.

#### Who we are

We are one of the largest European specialist in soil cultivation, seeding technology and crop protection. With more than 140 years of constant development, we offer customized solutions in all product segments.

Our main manufacturing locations are in Hungary and Germany. We have offices and locations across Europe. Our headquarters are in Austria.

### Our work

We offer our services and products world-wide, with sales offices all over Europe and Russia.



# ©PLUS HELIOS 400 THE LATEST GENERATION OF PLOUGHS

Maximum ease of use and enormous stability – all part of the new ©plus Helios 400 plough range from Vogel & Noot. The 4 to 7-furrow ploughs are ideal for new-generation, top-class standard-wheel tractors (180–400 PS). The new universal slatted body XST 450 achieves optimal work quality even on slopes.

### Smart customers appreciate ...

- maximum ease of use thanks to new hydraulic comfort box
- extraordinary stability thanks to unique Shell Power Frame system
- optimal edge ploughing thanks to the close positioning of the wide wheel near the frame - reduced weight/traction thanks to new design and high-tensile special materials
- safe working thanks to high trigger force of 7.5 tonnes
- optimal furrow clearance and crumbling in difficult, sticky soils and on slopes



# PHAROS 4600 THE CLEVER TRAILED SPRAYER

Crop-protecting, effective and especially user-friendly: the new PHAROS 4600 trailed sprayer. The innovative chassis, the convenient, problem-free and exact metering and the precise linkage save time, money and nerves.

### Smart customers appreciate ...

- user-friendly and convenient operation with numerous new functions
- flexible and precise linkage with special folding mechanism and variable geometry
- crop-protecting work thanks to lifting height of up to 2.90 metres - Safe transport thanks to low centre of gravity, exact tracking and low transport width



### UNICOMP LTD.

Agricultural Information and Management Systems

### Our products and services

- AGROSENSE is a wireless agricultural data acquisition system to collect real-time data such as soil moisture or leaf wetness to manage irrigation and other activities
- GRAINPATROL is a wireless grain monitoring system measuring temperature and humidity in stored grain
- REMOTETRAP observes the swarming of insects lured by pheromones and to improve timing of counteractions



### Our value proposition

Our company has been in the forefront of research and development within the field of Wireless Sensor Networks (WSN) for years.

Our Agricultural IT solutions support precision agriculture through agro-informatics, where nature meets human ingenuity and precision.

Our solutions feature low power consumption, unobtrusive operation and flexible operation.

Through smart farming, significant yield improvements can be achieved for plantation farming systems, green houses, outdoor vegetable farms and cropland management.

#### Who we are

Our company was established in 1984 and has since developed network-based solutions and applications for precision agriculture and other industrial users.

Our goal is to continuously expand our products and services to support all farming stages from sowing, irrigation and unloading to harvesting and storage. Our work has been recognized through several awards for innovation.

#### Our work

We support industrial manufacturing facilities with our wireless data acquisition systems throughout the EU.

Our systems are supported by research conducted by one of the leading agricultural universities, the University of Szeged.

Our company is certified by ISO9001 and ISO14001 and our products are CE compliant. We hold patents in radio interference and sensor applications.

www.agrosense.com www.grainpatrol.com



### WIRELESS AGRICULTURAL DATA ACQUISITON SYSTEM

The **AgroSense** system is comprised of a wireless network of small meteorological stations and other measuring sensors.

**AgroSense** is an easy-to-install, accurate and reliable solution that collects high-resolution data such as soil moisture and leaf wetness, to help identify the need for irrigation, pesticides and other treatments.



Measured values are transferred wirelessly by the system and data is centrally stored and analysed.

Easy-to-use interfaces and applications help the user visualise and evaluate the data and triggers automatic alarms by text message or email when pre-set limits are exceeded.

### **GRAINPATROL SYSTEM**

**GrainPatrol** is a wireless grain monitoring system that is capable of measuring temperature and humidity in stored grain.

Easily deployed or removed, it is based on unique design which resists even the harshest circumstances over time.



Measured values are transmitted wirelessly and are stored by the system, enabling the user to access stored data. If critical conditions are detected, the system automatically triggers an alarm via text message or e-mail.

### WATER & SOIL LTD.

Water saving technologies

### Our products and services

Water Retainer is an organic components-based soil conditioner which helps to reduce water usage and diminish the effects of drought and dehydration. Water Retainer increases yield and reduces costs in home and urban gardening, in agriculture and for parks and golf course maintenance.



### Our value proposition

The dramatic growth of world population requires an increase in agriculture output of at least 65% over the next 15 years.

While we face a multitude of resource constraints, water is at the core. With draughts and dry periods continuously on the rise, further accelerated by the climatic change effects water retention is key.

Our solution addresses the core issue of water retention and can be applied to over 3 billion hectares worldwide. With reduced irrigation needs and an increase in yields, the solution offers an outstanding return of investment to its buyers.







Plants can withstand longer periods without water or draught. The reduced fluctuation in ground water supply makes for a more resilient bio culture.

Plants require up to 50% less water which reduces the risk of drying out and can be used elsewhere.



Tests show that a more stable groundwater supply helps microorganisms live better in the soil. This results in better uptake of nutrients in plant root systems.



The liquid soil conditioner is based on organic materials and degrades without any residues within three months in the soil humidity.

### Who we are

Water & Soil Ltd. was established in 2014 to produce and commercialise the Water Retainer.

The method and formula to increase the retention of water in the soil was invented by a team of chemists, mechanical engineers, economists and microbiologists in response to the major issue of scarcity of water.

#### Our work

Water Retainer is currently being sold in Hungary and distribution agreements are currently under negotiation for Poland, Morocco, South Africa, UK and Ireland.

Expansion focus are over 100 countries with periods of mild draughts in Europe, Latin America, Africa, Middle-East, India, China and Australia.

The product has the license for the use in organic farming.

# C water&soil

## WATER & SOIL WATER RETAINER HOW IT WORKS

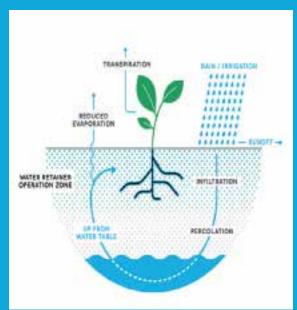
Water retainer is a water- based organic lotion applied to the ground by spraying or irrigation.

### The hydrophilic character of the conditioner allows:

- Rain and irrigation water to pass unhindered to the water table.
- Upcoming soil moisture is deterred from passing and evaporating on the surface but instead wed to water droplets - Even the stronger hydrophilic roots now draw the water droplets towards the roots

### Water retainer creates three clear advantages:

- Steadiness in the water balance through reduced evaporation and increased water uptake by the roots system
- Can be applied in any vegetation culture and any soil type without modifying the root system
- Humidity is taken from the air and trapped in droplets across the roots



# IRRIGATION COST SAVING FOR GOLF CLUBS FROM THE USE OF WATER & SOIL WATER RETAINER

Ten litres of Water Retainer per hectare were sprayed onto the surface of the fairway. In a second step, the residuals on the grass were washed off by 2.5 mm of irrigation. Over a one-month period, we applied 50% less irrigation every second day for the treated part of the fairway.

Without visible difference in the condition of the fairway between treated and untreated control area, at this dosage of Water Retainer about 25% of irrigation water are saved. With doubling the dosage to 20 litres/ha, we were able to reduce irrigation by a further 25%, so an overall saving of 50% of irrigation for this period.



# ÖKO LOGIKA LTD.

Organic Construction Material and Fertilizers

### Our products and services

- Organic asphalt stabiliser additive for stone mastic asphalt (SMA)
- Organic cellulose insulation for houses
- Organic cellulose mulch for hydro seeding
- Organic cellulose grape pomace compost fertilizer

# Environmental construction and agriculture, yes we can! 99

### Our value proposition

- Environmental friendly: We develop and manufacture environmentally-friendly products. All ÖKOCELL® products are made of 100% recycled materials.
- Uniqueness: We strive to continuously develop environmental friendly products starting from the ÖKOCELL® cellulose based construction materials to our newest product ÖKOMUSZ® for organic fertilization with maintained biological activity.
- Green impact: The use of our organic fertilizers replaces chemical fertilizers, pesticides and insecticides and creates a positive externality by reducing harmful substances from plants and without the contamination of ground and drinking water.

#### Who we are

Our company was established in 1989 in the Hungarian town of Hajós-Hild and has developed into an SME with a unique portfolio of recycled and cellulose based organic products.

#### Our work

Our products are distributed in Hungary, Slovakia, Romania, Macedonia and the United Arab Emirates, Turkey and the Kingdom of Saudi Arabia.

Our production process is carefully monitored through a quality management system and we are environmentally certified by the ÖKO2:201001.11/BMBR norm.



### **PRODUCTS**

ÖKOCELL® is an organic stabiliser additive used to manufacture mastic asphalt from standard granule size mineral mix bitumen for road construction. Crushed stone mastic asphalt manufactured by using ÖKOCELL® is extremely resistant to environmental impacts and loading stress. Usable in every asphalt mixing plant and dosages can be fed mechanically, by air engineering or manually in standard units for batch mixers.





ÖKOCELL-SZ®-SZIG is a cellulose based insulation for walls or roofs or for insulation of passive houses. It has a high heat storage capability and the completed insulation is solid and free of cold bridge. The insulation can be completed within a short time period with an effective blowing method and is dust and waste free.

ÖKOMUSZ® is a potent organic fertilizer based on grape pomace compost based on a side product of wine making with its use dating back to the ancient Sumerians. It restores the lost nutrients in the soil while maintaining its biological activity,increasing crop quality, plant resistance towards parasites and bio activity while it prevents nitrites, acids, and pesticide leaking into groundwater. It completely replaces chemical and other fertilizers and 100 kg (220 pounds) of ŐKOMUSZ have the same potency as 3-4.5 tons (6,600-9,900 pounds) of cow manu re.





ÖKOCELL®-MULCS is an environmentally friendly cellulose fibre, reproduced from natural raw materials and is used for hydro seeding allowing mellow green coverage. Solves the biggest problems of grass seeding by creating optimal conditions by preventing seeds from dehydration, hindering birds from picking the seeds and allows coverage for difficult or inaccessible areas. The material is degrading for 100% and it can be used also by smaller hydroseeding machines thanks to the handsome consistence of the bale. 1 bale (13kg) can seed 130m².



Biomass and biofuel

Our products and services

- Arundo bareroot in vitro plantlets for acclimatization (greenhouse) virus-free, genetically stable (non-GMO) vigorous, homogeneus, industrial scale
- Germination guaranties
- Technical and agricultural consultancy



### Who we are

ACF LLC was placed in 2013 from a strong belief in green energy and the promotion of renewable energy resources. We produce plantlets on an industrial scale that are uniform, vigorous, genetically stable and virus-free from sustained embryogenic plant cell culture. Environmental protection is at the heart of our activity and we are committed to the principles of sustainable development.

We provide the solution to involve marginal lands into biomass production for different renewable industries. We strive to save forests and other natural habitats by using perennial energy crops to produce biomass feedstock. Arundo also focuses on phytoremediation, cleaning contaminated soil and improving its quality.

### Our value proposition

ACF LLC is privately owned start-up company from the Biotechnology Industry. We also provide consultancy services based on acclimatization and plantation management technologies. In our intensive R&D activity with USC, we have developed new ecotypes (i.e., salt, cold, heavy metal tolerant, etc.) and continue to make technological improvements.

We produce Arundo donax energy cane bare root plantlets from our three laboratories in Hungary. The technology we use is based on sustained embryogenic plant cell cultures and we produce in vitro plantlets from somatic embryos. ACF LLC has a production capacity large enough to satisfy the needs of the Renewable Energy Industry.

### Our work

Our high-tech micro propagation laboratories produce and sell worldwide industry size, virus-free, robust, vigorous, homogeneous Arundo plantlets for the following industries:

- Biomass Power Plants
- Biogas Plants
- Second Generation Cellulose based bioethanol plants
- Paper and Pulp industry
- Textile Industry
- Furniture Industry
- Phytoremediation purposes

We sell our products in China, Brazil, Hungary, Africa, Italy, Spain, Vietnam, Slovakia and Serbia.

www.arundo-donax.com



As a research company in biotechnology, we work with all renewable industry suppliers and producers. Our focus is to fulfill the biomass needs of Power Stations, Bioethanol producers and Biogas plants.

### **OUR PROJECTS INCLUDE:**

### China:

Feedstock for a power station, Phytoremediation, feedstock for the pulp and paper industry (replacing eucalyptus).

### Brazil:

Complimentary energy generation for sugar factories and for the hydro-energy sector, biomass for the steel industry, feedstock for biomass power stations, heat production for plaster and plaster board manufacturing industry.

### Other:

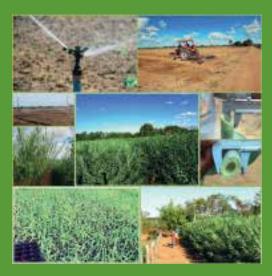
2nd generation cellulose based bioethanol production, **Italy** 

Locally grown and harvested ADX biomass for local municipalities biomass heating systems, **Hungary** 

Pellett and briquette production, Spain

Feedstock for Biogas industry, Slovakia

Complimentary energy generation for sugar factories, **Madagascar** 







### GEODÉZIA LTD.

Advanced geospatial mapping technologies

### Our products and services

- Cadaster and Easement Mapping
- Geographic Information Systems GIS
- Public Utility Locating, Mapping & Inventory
- Planning Maps, As-Built Maps
- Inventory & Facility Management Mapping
- Noise Mapping
- Thematic Mapping, Specialized maps & GIS Databases
- 3D Mapping and Modelling

66 Technology leader; largest surveyor and complete geospatial solution provider company in Europe

### Our value proposition

We provide a spectrum of geospatial services for clients. Our services range from traditional surveying to complex GIS solutions with system integration. We collect GIS data with LIDAR and GPR, above and under ground level [on roads, railways etc.], above and below sea level and in the air.

Our Data Management Centre utilizes the skills and expertise of more than 100 dedicated engineers, creating ideal solutions. Our data management is fast and cost-efficient. We utilize tailor-made, innovative data extraction techniques.

### Who we are

With 65 years of experience, Geodezia is the largest surveying company in Europe, with proven best-in-class expertise in GIS data collection, 3D point cloud extraction and data management. Our company has 17 offices worldwide and is headquartered in Hungary. We are accredited with ISO 9001 QA; ISO 14001 EM; ISO 19100 GIS and ISO 27001 IS systems.

Geodezia has the distinction of being a NATO assigned partner and is in a strategic alliance with the European Union, the Hungarian Government and the Army. Geodezia is the 2015 Hungarian nominee for the European Business Awards Business of the Year.

#### Our work

In figures, we have surveyed:

- 10 million objects
- 8 million parcels for cadastre
- more than 380.000 sq. km data processing with remote sensing
- 130.000 km electric distribution network
- 130,000 km water pipe network

- 40,000 km gas distribution network
- 28,000 km waste water network
- 10,000 km public road network
- 2,400 km railways
- 1,100 sq. km noise mapping

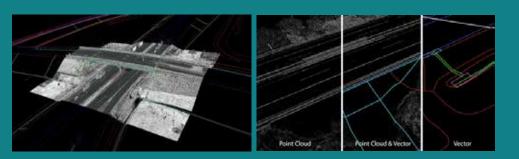


# 3D TRAFFIC INFRASTRUCTURE INVENTORY MAPPING WITH MOBILE MAPPING SYSTEM

The mapping of Traffic Network Related objects may be dangerous, and slow, often holding up the normal vehicle flow. Our Mobile Mapping System [MMS] collects data fast, densely, accurately, and safely. The MMS collects information remotely from the surrounding environment using sets of sensors working together. Thanks to this cutting edge technology, we can travel at speeds reaching 100 km/h, simultaneously collecting data at a point density of more than 1,000 points per square meter to obtain excellent spatial resolution.



The system can measure railways operating on a flat wagon or mounted on a convertible road/rail vehicle.



A highway section, as shown by a combination of point cloud and 3D vector image.

### SENSO MEDIA CO. LTD

Intelligent, interactive and integrated digital solutions for smart cities

### Our products and services

- Integrated solutions for smart governments, airports, retail, public transport and venues
- Interactive digital signage solutions
- Intelligent terminals, smart tables and smart phone solutions
- Software solutions for campaigns, promotions, payments, ticketing, analytics, face-recognition and detection of moods, genders, areas or physical movement
- Optionally integrated hardware devices like Bluetooth, etiquette printer, photo printer and payment devices like Near Field Communication (NFC)
- Software including map functions, product-related functions, feedback options, event-related functions, ad options and remote administration and monitoring

# 66 Innovative solutions for tomorrow's leading smart cities: Intelligent, Interactive and Integrated

### Our value proposition

We serve smart city clients with one-stop comprehensive services. We provide creative planning, in-house hardware design and manufacturing, software development and operational and administrative support.

Our intelligent terminals display tailored content and advertising based on our patented customer recognition algorithm, which recognizes gender, age, physical motion and even moods.

Our non-invasive data collection technique enables creative customer-centered campaigns, driving results.

### Who we are

Our company was founded in 2011 to provide innovative solutions for smart cities and smart retailers in the digital signage market.

#### Our work

We operate over 70 retail outlets and malls with over 220 devices. Our products have interacted with almost 100 million customers.

We serve leading global brands like Coca-Cola, T-Mobile, LG, Vodafone, H&M, L'Oreal and Toyota, with innovative campaigns and promotions.



### **SMART CITY SOLUTIONS:**

INTERACTION THROUGH INNOVATIVE, INTELLIGENT AND INTEGRATED DIGITAL SYSTEMS

### Sport arena and event venue management

- Interactive digital venue signage and terminals with integrated crowd management, lost & found, public transportation or parking information
- Access control, ticketing and facility-booking terminals
- Mobile applications for VIP guests and venues offering real time event statistics
- Smart running tracks providing lap-times, exercises and fitness assessment

### Digital conference management

- Event invitations and B2B planning
- Digital hostess service to welcome guests
- B2B tables with partner information, delayed arrival notifications and time-keeping
- Information desks for meeting planning & time-tables
- Check out, post-event analytics, and contact sharing

### Tourism and attraction solutions

- Smart benches combine functionalities (Wi-Fi, interactive information, car charging) with comfort
- City terminals provide access to multiple information services for attractions, public transportation, maps and value added services such as Wi-fi and ticket sales

### Intelligent airport management solutions

 Multilingual mobile software and devices providing full support for customers arriving at the airport from flight information to airport routing maps, parking to check-in

### **Public transport solutions**

- Digital bus stops combine information and interactive marketing with intelligent LED lightning, interactive touchscreens and brand recognition
- Public transportation ticketing with route-planning, payment solutions and large displays for easy purchase

### Mall management and retail solutions

- Mall management combining 3D map visualisation, information and tailored advertising and promotions based on mood, face, gender and age detection
- Digital light posters for smarter promotions with interactive games, photo printing and coupons
- Smart phone applications sharing information and data with shops and kiosks to personalize offers
- Double digital towers advertise, promote and collect realtime customer analytics
- Value added vending machines increase transactions with combined entertainment and promotions
- Smart petrol stations include fully automated filling pumps, targeted advertising and station management













### CLEAN-WAY LTD.

Environmental protection and public procurement

### Our products and services

- Mapping application for the recycling of construction-demolition secondary raw materials and wastes
- Environmental protection services (Waste management, flood control, landscape rehabilitation and landfills)

## 66 Recycled Demolition Waste for a Clean Future. 55

### Our value proposition

Our expertise includes waste management, transportation, collection, recovery as well as re-vegetation, project management, civil engineering, flood control, landscape rehabilitation, development of innovative waste management systems, and the arrangement of public procurement procedures.

With this expertise, we have created a digital application allowing for the tracking, recovery and sale of secondary raw construction materials as well as the management of polluted sites through an intelligent map system, supported by real-time databases. This product allows users to find the most effective and environmentally-friendly solutions to recycle or acquire secondary raw construction materials.

### Our solutions:

- Eliminate the need for storage
- Eliminate the need for landfills and payment of the EU landfill tax
- Provide a direct connection between raw material and those who need it.
- Manage all sites with quantity and quality data in a cloud format.

### Who we are

Clean-Way was founded in 1986. Our mission is to reduce the environmental burden that the building industry creates, by utilizing secondary raw construction materials and solving the problem of waste materials that building companies face.

Maximum reliability, professionalism and respect for our partners is our key to success. We are driven by the belief that the environment and the natural surroundings in which we live deserve the best possible care.

#### Our work

The company has successfully reused and recycled over 700,000 cubic meters in waste in several large civil project such as rail line constructions and large construction project. Our product is unique to the European Union and currently has no competitors.



### **DEMOLITION WASTE MANAGEMENT SYSTEM**



Clean-Way has developed an award-winning digital application, allowing the end user to identify detailed information about construction demolition waste.

From the location of the waste to the quality, quantity and types of waste produced, our application allows waste to become traceable.

Our application immediately pinpoints any nearby projects where these materials can be reused, indicating the most economic impact.

Pollution management: Waste products and pollution can be monitored carefully through a separate section of the application to help avoid further pollution.

Our application is listed by the EU as a "Best Practice" and has won multiple prizes. We have been awarded the 5th Greennovation Grand Prize in Innovative Projects, we are a winner of the "Digital City" category at the "You Are Coming" Innovation Project Competition and we also won "Okoindustria" Award Prize.

### **KONSYS INTERNATIONAL**

Smart city energy management

### Our products and services

AVReporter Energy Management Software is scalable and modular software solutions to manage all aspects of energy management AVReporter equally serves production companies, building complexes, logistic centres and malls, even the most critical infrastructure as banks, hospitals or data centres and multi-sites or city wide installations

# 66A highly flexible, open energy monitoring and management solution for professionals. 99

### Our value proposition

Our end-user achievements: Companies have achieved a short ROI period with up to 30% saving on energy bills and reduced their carbon footprint Our expertise and experience: Unlike typical software developer, we have gained more than 10 years' experience in integrating energy management systems, including planning,

auditing, proposal making, topology creation, hardware selection, delivering and aftercare. Our approach: We apply strategic thinking, practical insight and market research to the continuous development process. Our approach is collaborative, responsive and knowledgeable, with the goal of delivering success from the system integration, end-user experience and business perspectives.

Our support commitment: We offer additional services to help the project work, like project consultation, dedicated fast response TechTeam Support and Remote Engineer service.

#### Who we are

KONsys was established in 2003 by a team of friends and colleagues to create their industrial automation firm where high level of practical field expertise merged with innovation and technology.

In 2006, we registered a dynamically growing demand for energy management applications and combined our highly valuable practical field knowledge (hardware, software, system integration) with specialists to develop our very own energy management software, AVReporter.

### Our work

Today, AVReporter is an internationally recognized energy management software, employing some of the brightest talent in the industry and producing flawless experiences for leading brands such as Audi, eON, ABB, Auchan, Lidl, TESCO, Michelin, Honda or Velux. AVReporter Energy Management Software supports facility, energy and utility managers across more than 50 countries.



# DEMOLITION WASTE MANAGEMENT SYSTEMTHE BUILDING OF A SMART CITY

GYOR, HUNGARY

In 2013 the city of Gyor in Hungary, home of KONsys and E.ON, one of the world's largest investor-owned power and gas companies, have entered a partnership to transform the city into a smart city with the commencement of the European Youth Olympic Festival in 2017.

While efficiency options for smart cities cover every possible area, from public services, transport, utilities, health care to education, for Gyor energy management criteria we established.

For Gyor to achieve these goals, the process includes primarily rethinking production processes, connecting production units to a virtual power plant control system, organizing business and household consumers into smart networks and supplying them with smart meters.

For the complex energy management requirements, monitoring and projecting AVReporter Energy Management Software was deployed and integrated with measurement points for electricity, gas, heat and water through the communication network.

## BEST-IN-CLASS ENERGY MONITORING AND MANAGEMENT FEATURES

Their aims of implementing an energy management system were to improve power supply safety, optimize demand power and consumption and determine costs.

The results of the energy management system include:

- Quality problems resolved from 1-2 monthly power failures to zero internally and 1-2 annually caused by external problems.
- Demand power has been optimised with 10 % electricity saving
- The gas demand forecast optimised with 15 % saving
- ROI period between 6 months and 2 years
- Utilizing the measurement for certain products, production efficiency increase by 20 % and reduction of production scrap

While the production doubled over the years, due to the efficiently working energy management system, the increase of the gas and electric consumption is only one and a half times more.





### EASTRON LTD.

Application development and system integration

### Our products and services

- Business solutions (Workflow, BPM, business consulting, BPR, PRM)
- Intelligent, electronic queue management systems
- E-government and e-municipal solutions
- E-banking systems
- Project supporting and requirement management systems, executive information systems
- Networking solutions for industrial and office areas
- Energy engineering consulting for power plants
- Application development and mobile applications
- Systems and application integration, data consolidation/migration
- Personalized system support, system monitoring



### Our value proposition

Our key objective is to offer comprehensive IT support for customers whether they need to strengthen their market position or create efficient responses to business challenges. We are known for our commitment to significant attention to detail in design and our scrupulous compliance to the highest quality specifications. Our solutions and products excel in reliability and unequalled flexibility.

Our young and talented 30 person team includes programmers, mathematicians, electrical and IT system engineers and IT specialists with different qualifications.

#### Who we are

EASTRON Ltd. was founded in 1994. Over the last 20 years, we have provided our customers with tailor-made solutions in the field of queue, workflow and document management and monitoring and networking solutions for our industrial clients in the energy sector. Our professional partners come from many industries including banking, automotive, energy and software sectors.

We have a long list of distinguished customers including Microsoft, Advantys, Allianz Bank, Budapest Stock Exchange, Paks Nuclear Power Plant, Daimler Chrysler, GE Lighting and others.

We have established partnerships with multinational companies like CODRA, Advantys and have received the Best Distributor in the EMEA Region award from Honeywell.

### Our work

Our IT projects have been carried out in a number of countries including Germany, Jordan, Romania and Bulgaria.

EASTRON has implemented a quality assurance system compliant with the MSZ EN ISO 9001:2009 standard and acquired qualifications of levels ABOS 3 and 4T in nuclear safety.



# INTELLIGENT, ELECTRONIC OUEUE MANAGEMENT SYSTEM

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### **GRAVITY R&D**

Recommendation Engine, Artificial Intelligence

### Our products and services

Gravity RECO chooses which content (products, news, ads) should appear for a particular customer, based on user behaviour, interest and keyword. Using Gravity means more relevant content for the user, higher KPIs such as CTR, Page Views, Ad Views and Conversion Increases. All these directly translates into more revenue for the client. Gravity IMPRESS provides accurate, personal recommendations on all major IPTV, OTT and CATV platforms. The product supports all media content: VOD, SVOD, linear TV, catch-up, product, music and ads.

Personalization and recommendation engine provider for e-commerce and telecommunication businesses.

#### Who we are

Gravity is a proven leader in the big data and recommendation engine industry. The company was founded by four scientists in 2007, after its predecessor, the "Ensemble Team" beat over 40,000 other big data teams and achieved the highest overall score in the Netflix Prize Competition, making better record than the other front-rank group, BellKor's Pragmatic Chaos. The result was a 10+% recommendations quality growth in Netflix's engine. Gravity as been awarded for its efficient solutions with further prestigious prizes, such as International Classified Media Association's "Show Me the Money Prize" of 2012. Today, with a headcount of 40 people and with offices in Tokyo, Budapest, San Jose, London and Moscow, the group comprises mostly software engineers and PhDs grounded in data mining, machine learning and collaborative filtering.

#### Our work

- Platform flexible personalization solution;
- Designed to cope with product, user and system cold start problem & lack of product metadata:
- Adaptability to changing inventory, capturing lifecycle and ageing of contents, user preference tagging;
- Social network data;
- Personalized search capability;
- Flexible offline&online optimizer and multivariate testing framework;
- Big Data compliance: scalability and real time operation.



# SOCIAL AND DYNAMICALLY PERSONALISED SHOPPING MADE EASIER

### **BUSINESS PROFILE**

- Social shopping site
- Founded in 2010
- The largest in its category in Hungary
- Over EUR 3.5M turnover in 2011

### RECOMMENDATION SYSTEM PERFORMANCE

- 22.37 % increase in total income from the website
- -11.38 % increase in total income from newsletter



### Social shopping and personalization: hand in hand

Social shopping means people coming together to strike a deal - so they have to collaborate to get it. This is the case with personalization too - Gravity uses collaborative filtering algorithms to better match product offers with personal taste. Since BonuszBrigad was already using micro-segmentation tools and a set of recommendation rules to personalize product offerings, Gravity had to prove efficiency in an extensive A/B test against this. After a long period of testing, the results were impressive enough for BonuszBrigad to decide on integrating Gravity's outsourced recommendation solution - and even more, they decided to personalize product offers on all customer touchpoints.

### Cold start problem: An effective solution

Every e-commerce business has its own unique feature that makes recommendation implementations a challenge. In this case, the short lifecycle of product offers - usually only one week or less - became the biggest scientific challenge. This short lifecycle only lets the recommendation system collect enough user preference and behavior data just at the end of the product offer lifecycle. This means that the quality of recommendations and therefore conversion rates are comparatively low in the first few days. Gravity has been working hard to overcome the so called cold start problem. Performance data prove that channeling in more product and user meta data, and applying a custom set of algorithms is an effective way to overcome this issue.

### Multichannel personalization has synergy

Proceeding with integration, a deeper analysis of recommendation performance data showed that as soon as customers are faced with personalized offers on more and more channels, the efficiency of the system increases significantly – the efficiency increase of the whole is greater than the increase in the sum of each channel. This means that more personalized channels lead to an increasingly effective e-commerce ecosystem. This social shopping site has only one offer highlighted on the front page – and it's personalized, so visitors will see different products there. The order of the side listing is also personalized, just like the newsletter content sent to users.

### HOLOGRAFIKA LTD.

Glasses-free true 3D visualization

### Our products and services

Our patented light-field technology provides a natural 3D view with a continuous horizontal motion parallax unlike other 3D visualisation solutions. Its current applications include:

- Monitor-type 3D displays for medical, security, control-room, entertainment and gaming industry professionals
- Collaborative large-scale 3D displaying systems for oil & gas exploration, CAD engineering design, telepresence, simulators or theme parks
- A glasses-free 3D cinema system, which was launched at ICT 2010 as a world premier, and in 2012 with a full-angle monitor-style display Holografika seeks to develop home-entertainment applications.

Technology company with proprietary 3D glassesfree light-field visualisation technology, HoloVizio.

### Our value proposition

Market leader in light-field 3D displaying.

### Who we are

Holografika Ltd. is a technology company with proprietary 3D display technology and is also active in related 3D technologies (3D acquisition, compression, 3D applications) building a base for the future of 3D television.

### Our work

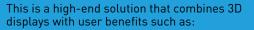
In 2005, the company entered the market with its HoloVizioTM displays which are sold in Europe, US, Japan and Korea.

Holografika has participated in significant EU R&D projects involving key industrial players and is a founding member of the 3D@Home consortium. These included the Ministry of Defence in Hungary and BAE Systems (UK) and different national and EU R&D projects. The company was awarded by Red Herring Top 100 Europe in 2005, the ICT Best Exhibit Award in 2008, the EUREKA Innovation Award in 2012 and selected by WEF as a Technology Pioneer company since 2006.



### **NATURAL 3D DISPLAYING**

The holographic 3D display system developed by Holografika overcomes the limitations of current 3D displays on the market. It reconstructs natural 3D images for multiple viewers within a reasonable field of view, allowing the viewer to walk around without restrictions





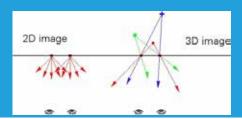
- Large field-of-view
- Continuous motion parallax, allowing "look-behind" capability
- No fixed-viewer positioning required, viewer can freely move in front of the screen
- No optical contradictions or side effects like discomfort or disorientation in longer, everyday use
- Stable 3D image which doesn't "jump" between views in the horizontal perspective
- No head-tracking necessary (no latency or accuracy problems)
- Ability to display any type of 3D information and to use different OpenGL based 3D software solutions
- 2D compatibility eliminating the need to switch between 2D and 3D view
- Full frame rate motion and real-time interactivity
- Good visibility and brightness under normal lighting conditions

### TECHNOLOGY PRINCIPLES

Both monitor-style and HoloVizio large-scale systems introduce a fundamentally new comprehensive approach to the field of 3D displaying.

Since HoloVizio is not a stereoscopic or multi-view system it lacks most of the backlogs and drawbacks currently associated with 3D displays.

HoloVizio is not a purely holographic system that handles an enormous amount of redundant information. It is instead based on holographic geometric principles with a special focus on reconstructing the key elements of spatial vision. The pixels, or rather voxels of the holographic screen, emit light beams of different intensity and colour in various directions. A light-emitting surface composed of these voxels acts as a digital window or hologram, showing show 3D scenes. The basic difference between a 2D and a 3D image shown below:



Each pixel (voxel) of the display able to emit light beams at a different colour and intensity to the various irections.

### **AQUIS IT SERVICES**

IT infrastructure services, application and hardware development

### Our products and services

- IT INFRASTRUCTURE SERVICES: The scope of our services consist of surveying IT systems, designing systems and hardware
- APPLICATION DEVELOPMENT: AQUIS has nearly 15 years of experience in the field of software development. We custom design and develop applications on Microsoft, Oracle and Android platforms.
- HARDWARE DEVELOPMENT & PRODUCTION: For decades our company has been involved in the designing and production of IT hardware. Our success is recognised by numerous trade and excellence awards in domestic and export markets.
- EXPORT: AQUIS has initiated a conscious market development in the Middle Eastern European region, Balkans, Russia, Ex-Soviet states, Western Africa as well as the Middle East.



Pay attention, understand, create, realize. ,,

### Our value proposition

Custom made systems. Software development according to client needs.

### Who we are

AQUIS Innovo is a Hungarian company with stabile and strong positions on the IT market and a wide network of export connections. Providing our clients with all round services is our prime concern, making AQUIS today a significant service and IT solutions provider company. The majority of our turnover comes from services. AQUIS has a team of dedicated; highly qualified managers, skilful experts and numerous references with a network of renowned partners. All this represents a guarantee for success.

#### Our work

As the fourth cornerstone of our strategy the company management places great emphasis on export:

AQUIS has initiated a conscious market development in the Middle Eastern European region, Balkan countries, Russia, Ex-Soviet states, Western Africa as well as the Middle East. Our developed and manufactured systems are widely conquering in the banking market.

The conscious R+D are considerably emphasized in the life of our company. On one hand it is the tool for developing our own products and on the other it creates space for experimenting with new technologies which can provide us with introduction of new possibilities for our company portfolio. For R+D we continuously spend our own resources, furthermore we work on several EU tenders thus ensuring the influx of resources for our further innovative activities.

#### References

MÁV-Start, British American Tobacco, Hungarian National Bank, Raif-feisen, K&H Bank, Obi, Metro, Invitel, Vodafone

AQUIS

### **QTAB**

The latest innovation in the AQUIS generation of queue management systems is called QTAB, QTAB is a modern and discrete, tabletbased foreground solution.

Each of its modules (totem, hardware counter, central display and the operator's panel) run on their own operating systems.

QTAB was born of a need to create a complex system with low maintenance demands, minimizing the number of components involved.

### TICKETEZ928

The Ticket EZ 928 ticket vending machine (TVM) has been developed to meet the widest possible range of users' needs. It is suitable for longdistance and local fixedrail and road transport services.

Ticket EZ 928 is operated by a highlyreliable industrial PC with no moving parts. The Ticket EZ 928 can be equipped with two printers capable of printing various ticket types (plain thermal paper or smart paper) and can issue plastic passes. The Ticket EZ 928 is a unique solution to ticket-vendor needs. It is capable of handling up to 6 paper rolls of different sizes and properties and can issue plastic-based RFID cards, magnetic stripe or chip-equipped travel passes. Travel fees can be paid with banknotes and coins, mobile phones, magnetic strips and chip cards, as well as contactless cards. In case of overpayment, the Ticket EZ 928 returns the change in banknotes or coins and it is capable of renewing and issuing travel passes.

The EZ 928 features a stretched LCD screen where advertisements or other content can be run. Due to the low power consumption the EZ 928 operates economically and guarantees long-term return on investment.





### WM SYSTEMS LLC

IOT/M2M communication solutions

### Our products and services

- Smart metering communication devices for water, gas and electricity meter reading
- Alarm and Fire Alarm signal transmitting
- E-health & elderly care
- Lone worker's protection
- Automated vehicle logistic & navigation system
- Personal and asset tracking
- Intelligent sub-metering and displaying system
- Designing industrial data communication equipment
- Telemetry services

# Complete M2M services for Metering, Security, Tracking and Telemetry applications.

### Our value proposition

With a diverse portfolio, we can offer all-inclusive and complete solutions to our Clients and prospective Partners with applications for Metering, Security, Tracking and Telemetry. As an engineering company with a deep knowledge and experience in the industrial data communication field, we design and produce communication devices for the latest IP and mobile networks. Our M2M server solution means centralized collection, processing and evaluation of the data communication between devices. High availability, secure data storage, wide range of monitoring & management possibilities and a dynamic user interfaces make this product solution attractive to our Customers. The M2M-based server specifically designed for our devices can display – as a service – the required and evaluated data, information, measurements, graphs, statistics and reports, thus giving the service providers overall data/device/user management information.

### Who we are

WM Systems LLC. was established in 2002 and has offices in Hungary, Romania and Slovakia. Our activities are based on the IOT/M2M (machine-to-machine) industry, serving our Partners with our complete data transmission solutions built for the network of the mobile and internet operators. Ever since its foundation, our company has been developing our own hardware and software, and creating M2M-based product families with the central communication and data collection M2M-server platform to be able to offer complete M2M services.

### Our work

We offer solutions through 43 different products for 8 M2M fields. Worldwide, more than 100.000 machines

can communicate through our devices, and this number is continuously increasing. Development, sales and services are performed in accordance with ISO 9001, IT operation comply with ISO 27001. Our company has a Bisnode AAA qualification.



### www.m2mserver.com

# READOUT OF 5000 WATER AND ELECTRICITY METERS IN APARTMENT BUILDINGS

Within the Intelligent sub-metering and displaying system, the wired and the wireless M-Bus radio signals of the wireless municipal consumption meters are received by the Mobile Data Collecting Center specifically prepared for data collection. Using the most up-to-date mobile data transmission technology, the data collector forwards the metering results in a concentrated way to our M2M server.



Our solution provides a wealth of benefits compared to the traditional reading systems. The TIAM® system – meeting the requirements of our age – enables the continuous improvement, customization and the complete reconstruction of the system without significant development. Apart from the meter data, the system is able to collect, process and display data from the following systems:

- collecting data from intrusion protection devices (safety & security alarm centers, or motion sensors, opening sensors)
- collecting data from smoke, CO detectors (alarms and error signals)
- collecting data (alarms and error signals) from personal protection panic button (SOS signal, fall detection)

All the above mentioned alerts can be forwarded to a security remote surveillance center and/or as an alarm to the smartphone of the tenants.

# AUTOMATED VEHICLE LOGISTIC AND NAVIGATION SYSTEM AT AN ELECTRICITY DISTRIBUTION COMPANY

The goal was to replace human dispatchers at a company with an automatic dispatching solution which can optimize work processes and vehicle routes. We implemented an overall GPS tracking and logistical system for service cars with a work organizer for car drivers. Our incident management module helps register incoming calls and problems as a ticket.



The service supervisor delegates the nearest service vehicle team to assign a job to the PNA device (navigation device) in the car. The tracker connected to the PNA helps the driver receive the GPS coordinates related to the received task on PNA, then automatically locates the address and identifies the object or location in the service area. The driver approaches the site (PNA reports to the center) and performs the service task. At the end of the process, the driver fills out a form, and the ticket is closed.