

„From ideas to valued deals”



From Mind to Market – the story of ValDeal

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What we have...

- ✓ Highly skilled scientist at reasonable cost
- ✓ Strong academic/university background
- ✓ Strong traditions in pharmaceutical sector
- ✓ Considerable results in basic research
- ✓ Large number of well-trained graduates
- ✓ Scientists working in the U.S. and Europe who would like to return
- ✓ Good R&D Grant system which makes young companies available to cover at least 30% of their R&D expenses from leverage finance sources
- ✓ Subsidies on patenting (very limited)

...and what we don't

- ✓ Lacking management experience in running LS companies – hard to find a people who ever seen a Petri Dish and also heard about cash-flow
- ✓ Limited scientific management skills – „why do I need project management”
- ✓ Scientists not used to working in a for-profit environment – „what does IRR, NPV and commercialization means”
- ✓ Most research results are not protected – „why should I patent? This makes my results harder to be known by others and will not have scientific success”
- ✓ Have to earn trust of international partners

Typical Hungarian problems

✓ **Difference in motivation:**

return, share in the market, new product vs. analysis and synthesis, to study and to teach

✓ **Industry:** looking for something that will support its own development, produces revenue

✓ **University:** „everything is for sale, but the industry is really picky”

✓ Demands of the market and development possibilities increase the distance between the industry and the university

✓ **Problems with quality spinouts – special „CEE spinoffs”**

✓ „well... we do actually have a company working here”

✓ „well... we are not really a spin-off, it was the university research team that spun off from us”

✓ little information flow towards the university

✓ in general, utilization without university approval

✓ unclear contracts and unclear property rights

✓ **Question of patents:**

✓ „What is a patent?”

✓ „Why is it good for me to obtain patents if I cannot publish?”

✓ „I would sell it, but who will pay in

Our experiences with a technology accelerator

integrator

Technology accelerator:

- ✓ Not a replacement to TTO's but a partner
- ✓ Not a Venture Capital
- ✓ Not a seed fund
- ✓ Not a business incubator

But a PROFESSIONAL company who does the scouting and the commercialization of the research results

Benefits:

- ✓ International perspective and resources
- ✓ Provision of services includes
 - identification
 - analysis
 - expertise – industry & scientific
 - human capital
- ✓ Provision of seed capital and follow-on finance

ValDeal Profile

ValDeal Innovation Zrt.

- Founded in 2006 in Budapest (Budaörs) following 3 years Innovation Management Consortium practice between ISC, CHIC, Danubia IP and Telkes
- ownership structure: ISC Ltd. 78%, Danubia IP Ltd. 22%,
- Injecting international partner know-how and business development assistance while building up in-house service capacity

Mission

- To facilitate and accelerate the growth of knowledge-based business in Hungary
- *"From ideas to valued deals"*

Advantage

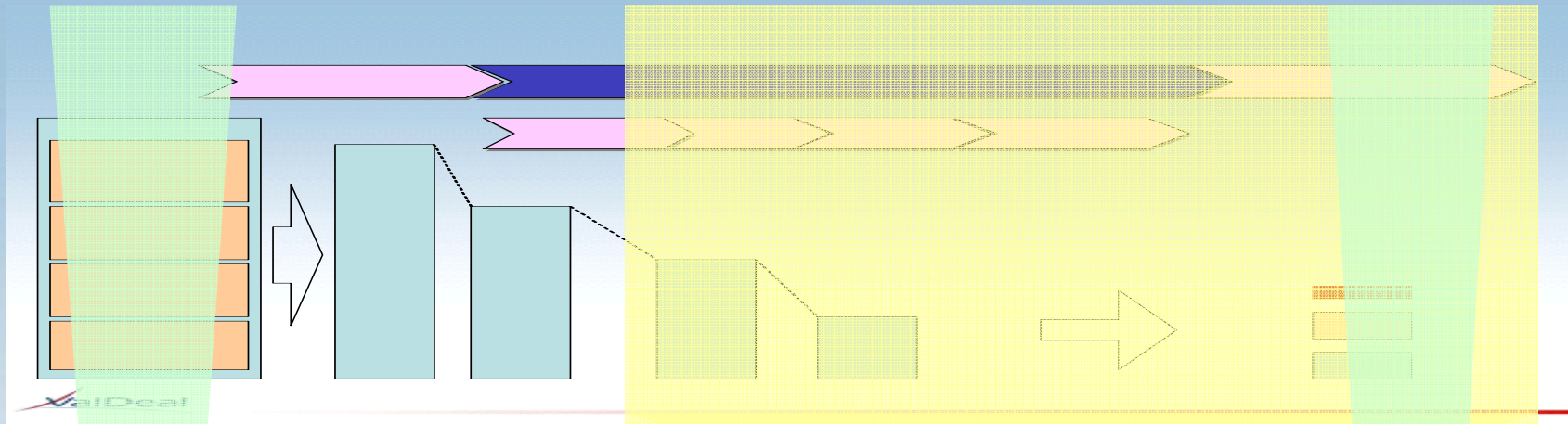
- a for-profit entity offering a full program of services and practical support to technology generators who desire to commercialize their intellectual property
- We put our business reputation on the line to grow ventures
- International know-how implemented locally, global market outreach
- Result-oriented approach

Success, step by step

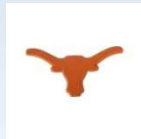
- About 700 technology applications between 2007 and 2009
- Market-driven screening and business development methodologies aimed at creating sustainable qualified deal flow



Main professional partners



IC² Institute of the
University of Texas at Austin



Central European Ventures

 **PVA** MV

INNO Group,
Karlsruhe, Germany



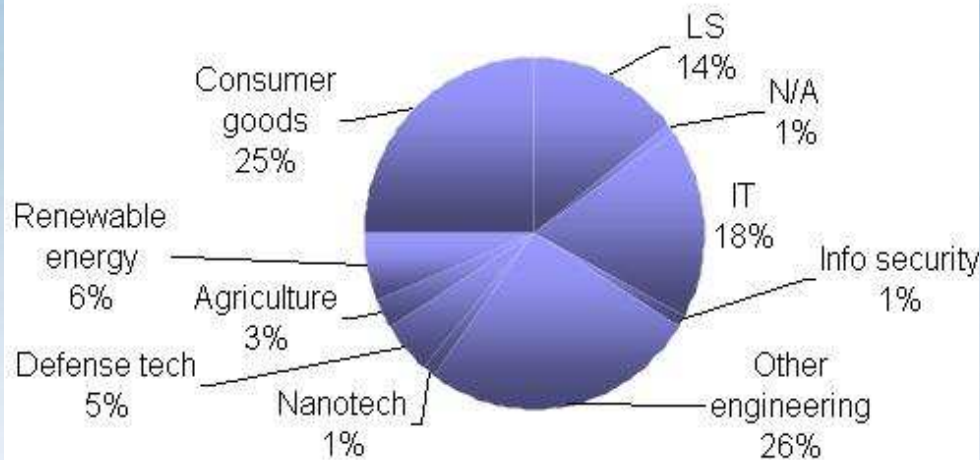
 **engage**
Key Technology Ventures

Our achievements in the first two years

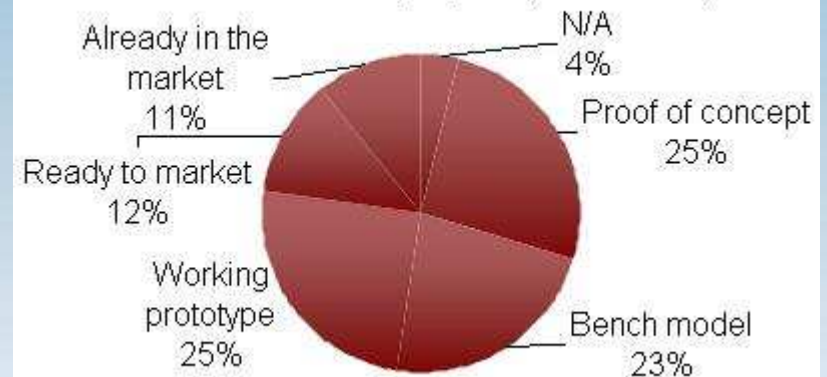
- ✓ 3 Life Science projects have been presented at Rice Alliance Venture Forum (Houston, TX) June 2007 ;
- ✓ 1 LS project is amongst the best 75 on World's Best Technology Showcase (Dallas, TX) 2008;
- ✓ 6 projects received significant early stage investment (between USD 300K and 600K);
- ✓ 3 projects has renowned international partners for further product development;
- ✓ 8 projects received more than EUR 1 million from research grants;
- ✓ 2 project has licensing agreement for the US market;
- ✓ We created Central European Ventures, our JV with Detroit Tech Town to establish local presence on the NAFTA market

Project generation statistics 2008

Type of the project (Total: 228)



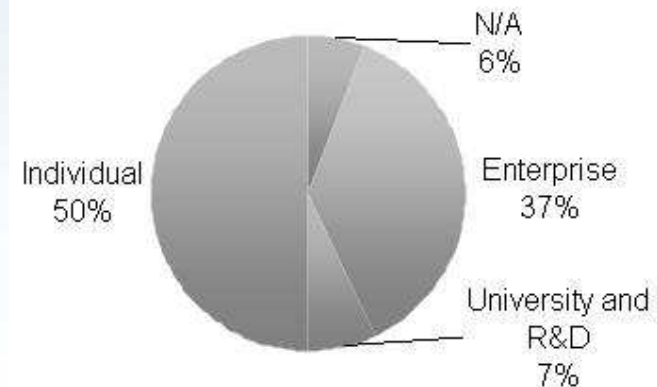
Status of the project (Total: 228)



In the most promising 28 projects :

- ✓ 10 Life Sciences
- ✓ 6 IT
- ✓ 12 other engineering sciences
- ✓ 15 has working prototype
- ✓ 7 has bench model
- ✓ 6 has product ready for market launch
- ✓ 15 invention from SMEs
- ✓ 9 from universities
- ✓ 4 individual inventor

Type of inventor (Total: 228)



ValDeal project selection I.

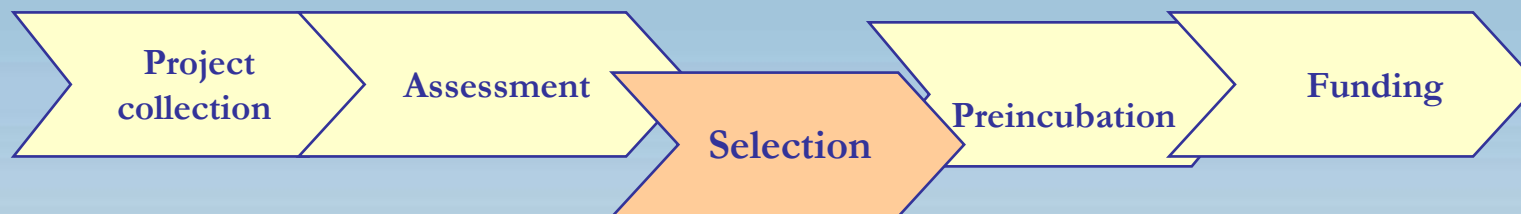


	Universities and Research Institutes	Applied research institutes / lab	Companies	Individual Inventors
Early-stage	Mostly early-stage life science projects	Mostly early-stage projects, however...		Mix of bullshit and breakthrough ideas
Acceleration		... sometimes ready for commercialization	Mostly Engineering inventions, sometimes with existing market	

 presence

For project selection, inventors need to submit their projects electronically.
 At first stage, we are NOT interested in „how it works” only what it does

ValDeal project selection II.



Quicklook Report

270/273 Intelligent Surgical

Device & MS+CCA

Dr. Zoltán Takáts, Rational Drug Design Laboratories

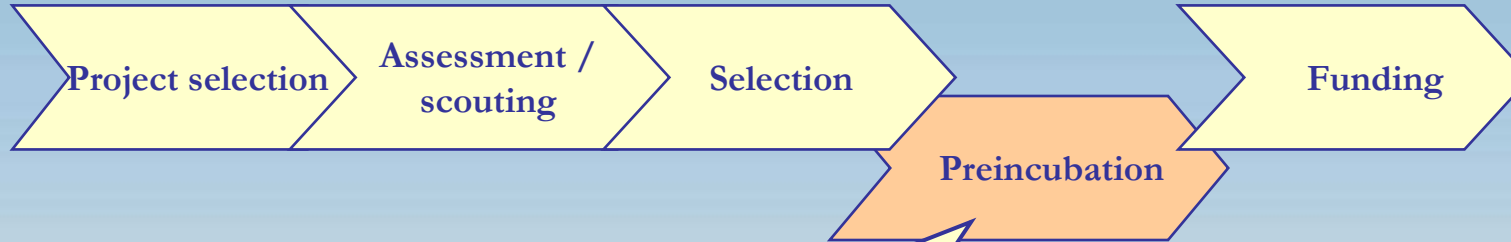
Technology Commercialization Program

A.) Projects are ready to investment / incubation OR easy to transform them into an investable business case

B.) Projects which can be commercialized by sales or licensing

C.) Those projects which has a validated potential, BUT they are not ready to market.
In these cases, we help them to identify and manage the next step (grant, additional research, ect).
„How much money do we need before we learn the next important thing?”

ValDeal project selection IV.



- Helping in establishing spinout / outlicensing from university
 - Setting up business strategy and investable business case
 - Setting up grant strategy
 - Preparation of teaser
- Fee AND /OR equity**

Executive Summary
Public version (check website upon request)

Jedion Ltd. **ValDeal**

Technology to accelerate biological tissues analysis

Overview

Jedion Ltd. develops and commercialises technology to characterise, accelerate the analysis of biological tissues using chemical analysis, not different technology.

1. Enable earlier and better decisions by drug R&D process by a unique combination of drug research and chemical analysis.
2. Support clinical drug decision making by providing additional chemical information for drug identification.
3. Decrease time and increase precision of oncology by providing real-time photo chemical information for drug identification.
4. "Pharma R&D accelerator" - "Chemical imaging device" to be used in pharmaceutical product R&D and forensic research to be launched in the Q4 2014. Key strategy points.
5. "Medical diagnostic accelerator" - "Chemical imaging device" to be used in forensic toxicology to help the pathologist differentiate between poisonous and healthy systems.
6. "Medical diagnostic accelerator" - "Chemical imaging device" to be used in oncology where chemotherapy and laser cutting is used to help the surgeon identify exactly where the tumour is located.

Jedion core technology is to develop these product applications in parallel which will be followed by a clinical drug safety commercialisation.

Summary

Technology

Jedion core technology is novel chemical characterisation (fingerprinting) of tissues by using photochemical FTIR (mass spectrometry) technology. The technology provides a digital "fingerprint" of tissues. Initial experiments have shown that this technology can be used to identify the same. Mass Spectrometry technology on these applications. As a first step, the photochemical prototype of the photochemical Carcinoma Laser Cutting Device (CLC) is being developed. The device is being developed and is being tested by a number of pharmaceutical companies. The chemical part is a pre-market stage with number of positive results on efficacy and safety. The device is being tested with surgical development and no dangerous side effects have been observed during surgery. The device provides the user (surgeon) with characteristic chemical fingerprint of tissues, as well as a digital image of the tissue. The device is being developed as a scientific tool for pre-clinical drug development and clinical trials.

Development status

Our platform technology has numerous commercialisation opportunities with different business strategies. There are examples in pre-clinical development, with the number of commercialisation opportunities. Our business strategy is to develop a pre-product in parallel which will be followed by a clinical commercialisation. The device is being developed and is being tested by a number of pharmaceutical companies. The chemical part is a pre-market stage with number of positive results on efficacy and safety. The device is being tested with surgical development and no dangerous side effects have been observed during surgery. The device provides the user (surgeon) with characteristic chemical fingerprint of tissues, as well as a digital image of the tissue. The device is being developed as a scientific tool for pre-clinical drug development and clinical trials.

Competition

1. The Chemical Imaging Device is the current standard for body autography systems.
2. The Chemical Imaging Device provides real-time, real-time information about the tissue characterisation of the pathologist in the operating room. In both cases, current state-of-the-art technology is on the intensive use of pathology. Real-time, providing detailed histological information. The results in a digital image of the tissue, putting both approaches into the operating room and laboratory for the operating pathologist.
3. Putting the Chemical Imaging Device into the operating room during surgery the system of real-time characterisation and 3D visualization of FTIR. FTIR technology, such as the current standard or state-of-the-art, offers solutions to both needs, providing real-time, real-time, precise chemical fingerprint information. Therefore, it provides the other histological identification of tissues during surgery and real-time information.

Team

The CEO is a former top researcher of Hungarian and international research institution (Budapest University of Science and Technology) with 16 years experience in a small entrepreneurial teaming approach experience and information in business. The senior strategy manager, Jedion, has extensive experience in management of technology transfer and commercialisation.

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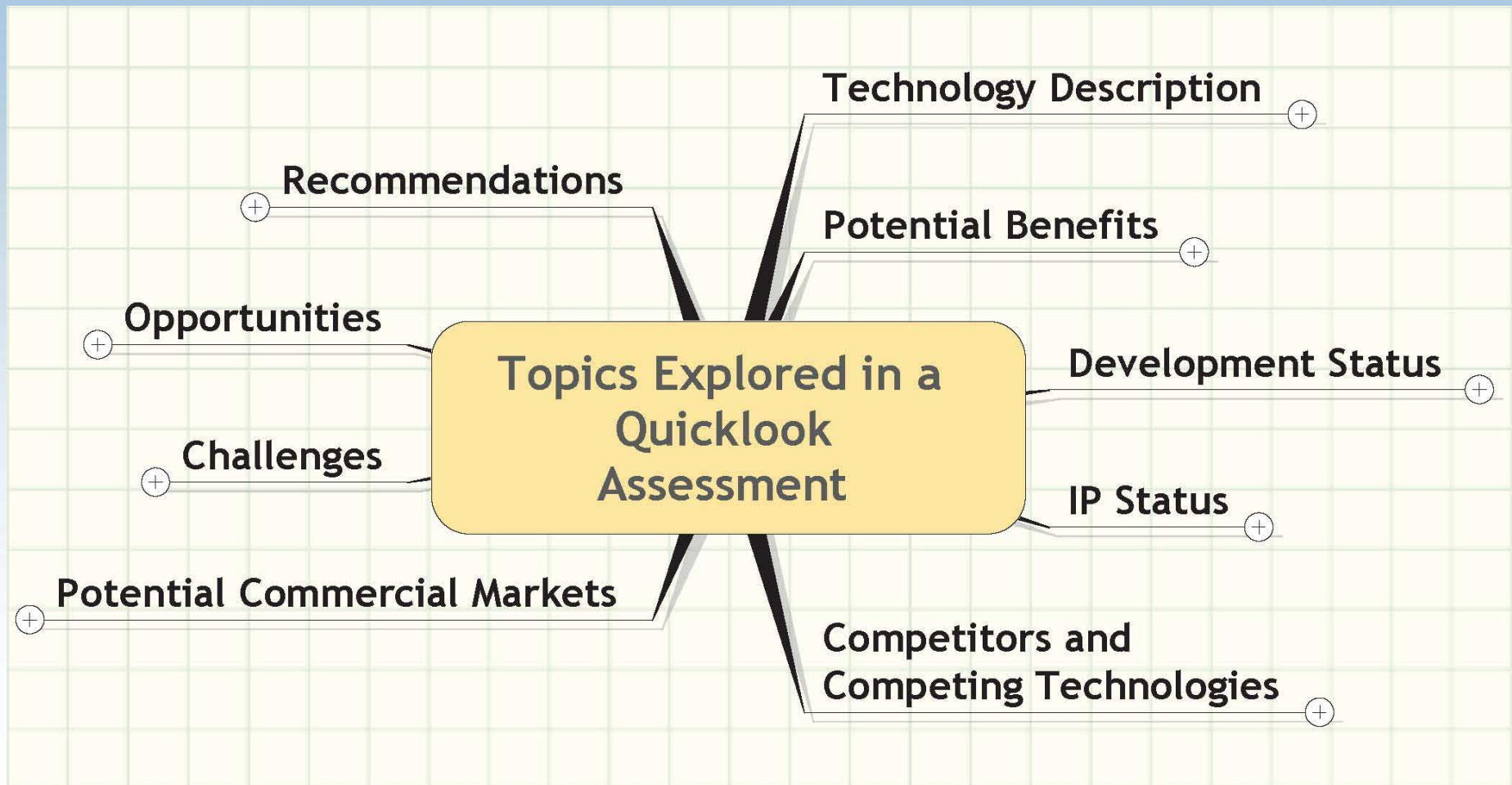


ValDeal project selection V.



- Preparation of business plan
- Setting up meetings with angel / early stage venture investors
- Evaluation of meetings
- Help in deal-closing and due diligence

The Topics Explored in a Quicklook

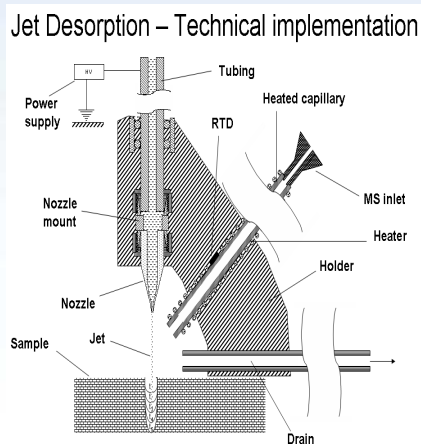


Case Study: Creation of an investable case from a science project – The Intelligent Surgical Device

Original Science idea:

- develop a tool for in-situ tissue identification
- Combine surgical water jet with mass spectrometer
- Result: a fully functional tool to identify in the OR whether the tissue we are cutting is cancerous or not
- Stage of invention: proof of concept

Contribution of ValDeal: Creation of an investable case



- » Scientific collaboration partners (partners from Harvard Medical School and other renowned universities and former company executives)
- » Development partners and development plan
- » Business plan
- » Angel Investor with EUR 300K Funding
- » Leverage finance for EUR 1.2 million
- » Next round of funding (EUR 2-5 million) due in 2010

Case Study: From Mind to the US market: Cryo-Innovation

- ✓ High Hydrostatic Pressure platform technology to increase the chaperone activity
- ✓ As a results of this technology and the HHP treatment of biological materials (Sperm, Embryo, oocyte) the stress tolerance of the materials and improved
- ✓ This leads to higher survival rate in freezing and thawing

Key markets:

- ✓ Animal Artificial Reproduction: bull and swine applications
- ✓ Human ART: proof of concept proven
- ✓ Human cord-blood and stem cell: large and untapped market

Key benefits:

- ✓ Increased survival rate of cells results to a more effective meat production in animals
- ✓ Higher pregnancy rates, decreased medical costs (500-2000 USD) and less burden for women in human ART
- ✓ Increased storability of human cord blood and stem cells

ValDeal's contribution:

- ✓ Obtained EUR 1,2 million grant financing
- ✓ Provided additional management and scientific expertise with the possibility of moving to the US
- ✓ Definition of new key application areas: cord blood and stem cell freezing – already licenced by Central European Ventures

Case Study: Creation of an investable case in IT: Gravity R&D

Science Case:

- ✓ Four university researchers from BUTE created a new generation recommendation engine to predict the taste of customers
- ✓ The recommendation engine can help e-commerce businesses to boost the revenues by 5-10% by recommending additional products to buy based on the previous shopping history and customer taste
- ✓ The efficiency of the technology has been proven at the Netflix prize, where the company (The Ensemble team) achieved the highest increase in recommendation

Key markets:

- ✓ Online retail: e-commerce shops: book, music, DVD, on-line grocery, travel,
- ✓ IPTV, Video On Demand and cable channels recommendation
- ✓ Financial: stock exchange portfolio recommendation

Key benefits:

- ✓ New generation of algorithms based on collaborative filtering
- ✓ Easy integration, and constant self improvement

ValDeal's contribution:

- ✓ Created an investable business case from a university project
- ✓ Managed to secure USD 600K seed investment from a local investor group
- ✓ Provides CEO and Business Development
- ✓ Managed to find beta customers like Vodafone Italia and Magyar Telekom and strategic development partners (Mindalliance)
- ✓ **The company already generates significant income**

Case Study: Licensing to the US market: Paper Potty

There is a gap in the hygienic-market: children after using nappies/diapers are not immediately toilet-proof.

The solution is Pottyflip, the Disposable Paperboard Potty

- ✓ patented system, which is granted by the Hungarian, European and also by the US Patent Office.
- ✓ Sold to big boxes: Auchan, Cora, DM, contract with BILLA and Australian distributor, but not a breakthrough success previously
- ✓ There is a significant gap in the market for a product, that is appealing for small children and is easy to handle for parents

ValDeal's contribution:

- ✓ Identification of a licensing partner
- ✓ Coaching the inventor
- ✓ Currently the US sales are close to million examples with additional retail chains (e.g. Wall-Mart) in the picture

Conclusions of the first two years

- ✓ Hungary is blessed with projects which has great scientific potential BUT there are various limiting factors exists:
 - ✓ Creation of investable business cases from scientific projects are more difficult, takes more time, money and effort than in other countries (e.g. Israel);
 - ✓ Lack of entrepreneurial culture and more seriously decreases the success factors;
 - ✓ Moving projects forward without early-stage VC market was extremely difficult (lack of Jeremie funds up to now);
 - ✓ Adaptation of best practice innovation models also takes time and money, and needs special expertise regarding the local market;
 - ✓ Low number of experts with significant startup and VC related experience is also a limitation;

The most important conclusion is that neither the necessary entrepreneurial culture, nor the financial infrastructure (grant – angel – seed – VC working in harmony) were present during our experimental period.

Testimonials

- „Hungary is blessed with world-class scientists and innovators. We feel that ValDeal will take a leadership role in bringing these innovations rapidly to market in the years to come. The IC² Institute is proud to be part of the ValDeal team.”

Len Denton, Program Manager, The University of Texas at Austin, IC² Institute, Austin, USA

- "Working with ValDeal means working with a highly professional team. They have a trendsetting business model and are able to transform technologies into marketable innovations. This is what makes them unique in the Eastern European market."

Guido Hillebrands, Chief Executive Officer, INNO AG, Karlsruhe, Germany

- „We have been very impressed with the ValDeal incubator and its team. The quality of dealflow, the rigour of the selection process, the professionalism of the team and the overall quality of work is among the best we have seen in any incubator in continental Europe.”

Nikolaus Spieckermann-Hutter, Principal, Investment Manager, Gamma Capital Partners, Vienna, Austria

- „ValDeal has a commitment and expertise to bring the best technology and business opportunities to the market place. We are proud to be selected as ValDeal’s business partners in North America.” *Randal Charlton, Interim Director, TechTown, the Wayne State University Research and Technology Park, Detroit, USA*

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