

185th Business Plan Presentations Held on March 14, 2017 at Iwasaki Gakuen, Shin-Yokohama, Japan

1. Cellspect Co.,Ltd. President Mr. Takuya Iwabuchi <https://cellspect.com/en/>

Established in April 2014 Capital stock: USD \$ 1,579,000

Cellspect Co., Ltd. is pursuing the development of items and related solution business satisfying the three prerequisites for next-generation medicine, i.e., lower invasiveness, smaller size, and more personalized medicine. It is doing so by an interdisciplinary fusion of technology for sensing diseased molecules with IT solutions. More specifically, it is engaged in the following activities.

1. Development of inspection systems using mobile terminals for the realization of "heads up" healthcare, and transformation into software applications
2. Development of next-generation point-of-care testing kits and a clinical diagnosis system adapted to it
3. Development of probes for non-invasive diagnosis enabling decisions as to whether or not endometriosis tumors are benign or malignant
4. Development of new primary care tools and global expansion of consumer healthcare making use of them (including the world's first centrifuge-free plasma-separation self-blood-extraction kit)
5. Development of a monocyte collection and diagnosis system and pathological diagnosis system enabling personalized cancer diagnosis, and companion diagnostic agents

【Re-Cap】 The company chose the city of Morioka for the site of its head office in light of the circumstances at the time.

Semiconductor-related business had gone into decline. The area had a technological buildup, but the volume of work had gone down. There was a cluster of suppliers with the elements required for manufacturing, and the company figured it could make progress by developing medical equipment with them. It is a bio venture with about 30 employees, and is engaged in marketing in collaboration with partners in Silicon Valley, with a view to inducing ripple effects in the United States and Europe. In the "heads up" healthcare system, inspection and measurement data gathered from a single drop of blood are uploaded to a cyber cloud. Mr. Iwabuchi stated that it would allow people to get proper consultation through links extending to healthcare concierge services offering advice from physicians.



2. i3,Inc. President Mr. Masahiko Masuda <http://www.i3-inc.co.jp/>(Japanese)

Established in July 2016 Capital stock: USD \$ 20,500

i3, Inc. is engaged in development of systems and the Smart Athlete service.

- 1) Application of original technology to transform sports nutrition management support, which has been a labor-intensive service, into an IT service (Smart Athlete)
- 2) Provision of optimal, personalized support for sports nutrition management to each and every athlete
- 3) Provision of management support to managers and coaches so they do not miss opportunities for enhancing the performance of athletes under their care

* Taking up the challenge of huge markets through full use of big data

* Provision of high-usability healthcare support making extensive use of the knowledge and basic data in the Smart Athlete system

【Re-Cap】 Mr. Masuda did some boxing in his student days, but said that even Olympic athletes did not receive any nutritional guidance. For boxers, weight reduction is an important element, and he once had to lose over seven kilograms just one week before his fight. He managed to lose the weight, but ended up losing the match. Today, nutritional science is much more advanced, but the athletes benefiting from it are few. Athletic plans are all centered around training, and the number of sports nutritionists is extremely low at 174. Their services are available only to first-rate professionals; almost nothing is done for second-rung athletes on the college or high school level. The company wants to make it possible for all athletes to obtain guidance through applications it develops that fuse nutritional science and sports and are driven by AI engines. Masuda said his dream was a body composition analyzer which outputs nutritional advice to users who merely stand on it like.



3. Tsukuta Technical Research President Mr. Shigeo Tsukuta <https://www.tsukuta.jp/>(Japanese)

Established in December 2014 Capital stock: USD \$ 3,000,000

* Calkan: calculation of calorie and nutriment intake from photos of meals

-- Use of cloud-side machine learning to distinguish types of meal photos sent by smartphone and calculate the intake of calories and nutriments from them

-- Replacement of supervised learning with semi-supervised learning in order to heighten the precision of image discrimination, and addition of "man" to collaborative learning in turn, for Man & Machine Ensemble (M&ME) to promote collaborative learning with cloud sensing

-- Ability for provision of M&ME in collaboration with a company utilizing it in other applied fields

【Re-Cap】 Mr. Tsukuta was prompted to create this business by his experience of hospitalization for about two weeks due to a cerebral hemorrhage caused by hypertension. The time spent in the hospital was difficult. He was determined to avoid another hospitalization, and believed that, as far as lifestyle diseases and the like were concerned, the path from pre-symptomatic conditions to good health lay in continuation of a healthy diet. Management of food intake on a continuous basis is important, but employment of a nutritionist takes both time and money. He figured that the problem could be solved if one could learn the calorie and nutriment intake from photos of meals taken with a smartphone and sent by a simple operation. In his view, the service is characterized by integrated machine learning based on the combination of simple operation by the user and supervised learning.



4. Comseeds Inc. President Mr. Tatsuhiro Onaya, Presenter Managing Director Operating Officer Mr. Kunihiko Yoshimitsu

Established in May 2006 Capital stock: USD \$ 100,000

Comseeds Inc. succeeded in packaging a security product that fundamentally changed the concept behind RSA, which constitutes the standard in security. For this achievement, it was given high ratings by the Mobile Computing Promotion Consortium (MCPC), which stated that the diffusion of its products could change the current situation of rampant information leakage, and presented it with the Security Committee Special Award in the MCPC Awards 2016.

The company's system rests on internationally patented technology. It blocks attempts to divulge or modify information contents on devices such as servers, terminals, smartphones, and tablets by unauthorized insiders or hackers etc., and enables advance prevention of information leakage by encryption-based security. It has thus far sold its products (before packaging) to companies including Honda Motor Co., NTT Data Corporation, and Yachiyo Bank.

【Re-Cap】 Information leakage and password theft are frequent occurrences these days. There is a limit to their prevention with the existing security systems. About 90 percent of all information leaks stem from outsourcing. Comseeds believes that information encryption is the last hope, and that risks cannot be met by the conventional security approach of access control. Its system features control by a check of authorization. It treats even the developer as an outsider, enables centralized control by means of keys, and creates a safe (in the sense of "strong box") area within the machine in which it is installed. Mr. Yoshimitsu said that the setup makes it possible for only parties who have been approved to view data.



《Impressions》 At this last meeting, too, there were presentations by companies in diverse fields. Each was cultivating new markets, and it will be interesting to see how their business develops from now on. If your company would like to make a presentation at the meeting, please contact us at an early date, because the schedule is filled up for a few months in advance.