

## The Introduction of the 2013 AABI Award Winners

### The winner of 2013 AABI Incubator Year Award

#### 👑 *Nangang Software Incubator (Chinese Taipei)*

Nangang Software Incubator was established in 2001, directed by Small and Medium Enterprise Administration, Ministry of Economic Affairs and operated by Institute for Information Industry. Since 2002, NSI and III took the mission from government to assist small and medium enterprises in Chinese Taipei to achieve entrepreneurship innovation by providing the services to support their local activities:

1. Space, Facilities and Administrative Support
2. Technical and R & D Subsidies & Support
3. Brand Marketing & Alliance
4. Legal Support for Business & Intellectual Properties
5. Latest Information from the Sector & Alliance
6. Investment & Loan Consultancy Services

Since 2002 till presented, NSI has served more than hundred organizations & companies from domestic & foreign areas. As NSI has become the leader of the incubation industry, NSI is committed to share the experience to help new universities, local/foreign governments to build up their own incubation center for helping local industries and start ups.

### The winner of 2013 AABI Torch Best Entrepreneur Award

#### 👑 *Mr. Kranthi Kiran Vistakula, CEO, Dhama Innovations Pvt. Ltd. (India)*

Kranthi's passion for innovation led him to pursue his masters at MIT, USA. While there, he led a NASA-sponsored research project to generate electricity, using proteins for space applications. At MIT, Kranthi was troubled by the inconvenience of piling on layers of clothing to combat the frigid winters, only to take them off the minute he stepped inside the warm university indoors. Rather than dismissing this daily hassle, he set out to innovate ClimaCon® – a wearable cooling/heating technology that could keep the wearer's body temperature at a comfortable level irrespective of the ambient weather. Kranthi had always wanted to be an entrepreneur, and he had already won US\$ 3000 from MIT business plan competitions for ClimaCon®. Besotted by his idea, he came back to India to found Dhama Innovations. He presented his idea to the Indian Government and won a grant of US \$ 95,190 to pool into his business.

During early development, ClimaCon® was a crude concept from a technological and design viewpoint. Kranthi faced several challenges to make ClimaCon® wearable.

These involved decreasing device's weight, increasing efficiency, and designing it to better conform to the human body. With his team of NID and IIT designers, he carried out several prototype iterations, and brought the weight down from 8 kilos to 800 grams, making it slim, pliant and compatible with rechargeable mobile-phone batteries. His next challenge was to market the innovation. Kranthi tackled this by focusing on the US medical device market, with the advantage of high consumer awareness and already existing distributor networks.

Kranthi's major accomplishments are –

- Making the technology market ready and developing diverse product applications
- Collaborating with US distributors to launch products in US medical device market
- Securing orders worth US \$ 60 million
- Winning several awards and accolades, and extensive coverage in the international media

**The winner of 2013 AABI Torch Award for Promising Entrepreneur**

 **Mr. Olarn Rattana-anan, Managing Director, SensorBuilder Co., Ltd. (Thailand)**

SensorBuilder founded by 3-friends whose know each other more than 20 years. How are they become founders? All of them had differences working experience and expertise. However, they all do working related in electronic & IT technology. And have the same dream to build their own innovation to show that we can be creator. Yes, we all want to be successor as business owner. Not employee. After meeting in weekly basis, we all agreed to use our expertise in electronic & IT to create innovative product base on "Electronic-sensor" which we can unique it at lab. From now & near future, everything need sensor to measure, and auto sensing in many thing such as Heart blood pressure, Auto watering in Farm, Auto sensing in car, Measure body movement for rehabilitation , etc. From this device, we can enter to many business sectors and create many things. Our business will not stick to one direction. But it can move and develop to what customer need in the future.

Let introduce our founder member:-

Firstly, Mr. Olarn Rattana-anan, he graduated in Master of Computer Science, Bachelor of Science (Applied Physics) and had experienced with multi-national (culture) companies as following :- 1.) Design & Process engineer with Minebea Japan (Loud Speaker Manufacture) 2.) Product Quality engineer with SCI system (Print Circuit Board Assembly (PCBA)) 3.) Project & Sale manager with SVI Public Company (PCBA) 4.) Senior Manager, IT & PABX Project sale with SIEMENS Germany 5.) Senior Manager, IT & PABX sale with NORTEL USA.

During 20 years experienced with worldwide companies he had trained & worked with both technical and commercial sides along with 10 years management trained & experienced in high level management which it is necessary to lead their own company. As he do know nature of both technical & commercial with understand what customers (users) like to have (buy). So, he has ability to lead “Product & Business development” also and it is one of his strong points to make our solution real suitable to our customer need.

Secondly, Dr.Amporn Poyai, he is expertise in Microelectronic and got Ph.D. from Belgium. He had much experiences on special-sensor during he is Director of Thai Microelectronic Center (TMEC) and now he is still in that post. The special functions, new technology, new manufacture processes and research are the main job of him. He is the key man who made product’s unique and further ability over our competitor. TMEC is Micro-electronic lab which set up by Japan technology. It is very useful and valuable to keep our technology more advance than competitors. Furthermore, he also work closely with other university like King Mongkute Institute of Technology(KMIT), Chulalongkorn university and Tokyo university to enhance us to do variety of business sectors such as Agriculture, Healthcare, Environmental and Energy.

Finally, Mr.Narong Auywannang, he graduated in Bachelor of Science(Applied Physics). He had a lot experienced in manufacturer & supply chain as he worked in factories for 20 years. Minebea (Ball bearing) is his first engineering & QC job and Taiwan LiteOn is second (and last) company he worked in post of Engineering manager and responsible for manufacturing process, Quality control process and Sourcing & Verification of suppliers. He is the one who working on our production processes such as co-operate with factory, Quality Control, Delivery & Shipment control, Costing control and also after sale & service as he have knowledge & management skill on these jobs together with service mind.

From all qualifications of founders can lead & take care of 3-main parts of our business,

- 1.) Company management, Sale & Business management and Products development.
- 2.) Product & New technology Research, Circuit design, Integrated Technology.
- 3.) After sale & Service, Production and Supply chain

**The winner of 2013 AABI Torch Award for Technology Transfer**

**👑 Mr.Shine C.Chung,Chairman,Attopsemi Technology Co., LTD (Chinese Taipei)**

Mr.Shine C. Chung is a semiconductor veteran with more than 30 years of experience after graduated from Harvard University. He could have a comfortable

retirement life after serving the leading foundry TSMC for 7 years. A few months after his retirement, he conceived a very innovative idea in One-Time-Programmable (OTP) memory -a specialty memory IP that can be used for chip ID, security key, inventory control, parameter or configuration storage, device trimming, memory repair, and PROM for MCU code. There are three reasons that compel him to start Attopsemi: (a) the market is huge, (b) there are NO adequate OTP solutions and no market leaders so far, and (c) I have a dream OTP in all technical aspects and for almost all CMOS nodes. He felt that him owe it to himself to provide the best possible OTP IPs to serve the semiconductor communities and to rescue them from the problematic OTPs that waste their time and money.

After three years of development, Mr.Shine finally have working OTP macros from 0.35um to 40nm, based on the same mechanism---electromigration, can easily port our OTP cells and macros from one CMOS generation to another and across different foundries. Just a few days ago, Mr.Shine showed to the world that High-K Metal Gate (HKMG) can be programmable as an electrical fuse. Mr.Shine also showed to the world that our I-fuse™ OTP can be scalable from 0.35um to 28nm according to Moore's law. He submitted a technical paper to IEDM yesterday.

When Mr.Shine started Attopsemi, he could hardly meet anybody, a professional or not, that believed what I could do. They all said that you couldn't do better than any foundries. You didn't have any markets at all. You couldn't burn HKMG as a fuse. The only strength that kept me moving forward is his belief and his passion to perfect the state of art and to provide the best possible OTP solutions to serve the semiconductor industry.

The I-fuse™ OTP is based on 1R1D (1 resistor, 1 diode) cell, where D stands for the junction diode of a PMOS source/drain (or P+ over N-well diode) in any standard CMOS technologies. The diode can be used as program selector to replace the weak and large MOS device in the conventional 1R1T (1 resistor, 1 transistor) cell. Since a diode can deliver 4-5x more current than a MOS device at the same voltage and the area can be about 1/4-1/5 of a MOS device, the OTP cell size can be reduced significantly. As a result, we achieved 1/100th cell size reduction, 100x better in reliability, 1/8th program current, and scalable across CMOS nodes. Though we proven the concept in a few months, we took almost two years to make program voltage window wide enough and to meet the conventional I/O voltages of 1.8/2.5/3.3/5V for different CMOS nodes. So far, we have working I-fuse™ from 0.35um to 28nm. We also demonstrated the first time

that metal gate can be programmed as fuse, contradicting to what commonly believes in the semiconductor communities.

## The winner of 2012 AABI Torch Award for Internationalization

 **Mr. Eric Yung, CEO, Playnote Limited (Hong Kong)**

Eric is a serial entrepreneur with great enthusiasm. Before starting this company, Playnote Limited, he has co-founded another technology-based company, Perception Digital Limited, which was listed in the Hong Kong Stock Exchange on Dec 2009 (HKEX: 01822). He founds Playnote Limited after he has exited from Perception Digital.

As the technology and business of the company focuses in automatic digital professional music education, which is a blue ocean industry, the company has faced a lot of problems at the beginning but Eric can use some innovative ways to solve these problems.

The core product of the company is a software which uses digital ear to listen what students have sung and the notes that students have played through music instruments, and uses artificial intelligent and cloud computing to analyze the performance of music students, as if a real music professor. This is very new concept that requires great effort in customer education. Other than using huge budget to promote in traditional advertisements, he has arranged some public seminars which lecturers from university teach skill in attending music examination by using the product as a kind of product placement. This method is innovative and cost effective. The seminars not just increase the popularity of the software but also the creditability of the software.

Eric also has a very strong motivation skill and presentation skill, which greatly help in solving problems. He has helped the company to line up various stakeholders, including music teachers and music centers in various countries to join the promotion. A lot of service providers are motivated by Eric and are willing to provide a much lower cost for the service, and this greatly improve cash flow status of the company.

By Eric's great presentation skill, the company has successfully achieved various international awards, including the Grand Award of the Best Start up Category of Asia Pacific ICT Award 2012, which is the top award in ICT industry in Asia Pacific. He has also attracted a group of Angel Investors, which have shown a strong interest in investing in the company and the negotiation is in final stage.