OPENNESS: It is more blessed to give than to receive!

A small card written with "BRDIP + ABA" was a shock to me when Dr. Tsujimura showed it to me. It came after he initiated EOI (Ebara Open Innovation) and EOL (Ebara Open Lab) as new R&D programs at Ebara. Ebara is the first company I know of that changed its research and development to the ‘open innovation’ concept. I was curious about the meaning of "BRDIP + ABA." In the same card, it explained BRDIP as ‘Business, R&D and IP,’ and ABA as ‘Academy, Business, and Association.’ By expanding business with associations and academia, Ebara continues to contribute to both academia and the associations and, in the long run, could secure the business, the R&D, and the intellectual property.

I was very curious when and who invented the word and concept of Open Innovation. I came to know Prof. Chesbrough at Hass Business School, UC Berkeley who first introduced the concept of Open Innovation in early 2000. As an engineer once in Silicon Valley, he was so shocked to know no useful ideas and advice from academia. He determined to be a professor to bridge the gap between industry and academia. After his Ph.D., he became a professor at Harvard University and then moved to UC Berkeley. He is now the director of the Garwood Center for Corporate Innovation at UC Berkeley. He defines "Open Innovation" as "the use of purposive inflows and outflows of knowledge to accelerate internal innovation and expand the markets for external use of innovation." His open innovation seems to be more focused on management and business, not technology research and development.

In my experience, I never met yet any company like Ebara having the mindset of open innovation in technology by giving up the vertical and traditional internal research and development program. I have known Ebara for many years and met many Ebara people all over the world. Ebara seems to be one of the traditional technology-oriented Japanese companies. However, recently Ebara took a giant step toward the future. Ebara started to influence the community, the society, the country, and the world. The keyword for the future is connectivity. Ebara has been connected but would be better connected through EOI so that the purposive inflows and outflows of knowledge will prevail in and outside Ebara.

As a part of Ebara Open Innovation, I am much honored to work with you. My students and I appreciate your support and encouragement in the CMP research project. When the project was first started, the objectives and direction seem to be vague and unpredictable. Now after four years’ collaboration under the umbrella of the EOI program, not only I see the students graduating in the CMP area with practical
knowledge as process engineers, but also unexpected high impact research results and publication. I can also assure that the EOI program made so many graduate students globally participate CMP research and present the fundamental research results at the international CMP conference. The CMP community is only the semiconductor module which attracts many young graduate students at the international CMP conference due to the EOI program. Young graduate students mean a bright future in CMP community. Furthermore, it will make whole CMP international community become a family by the friendship of young students participated in annual CMP international conferences.

According to Wikipedia, there are three kinds of knowledge: natural science (technology), social science (politics) and humanities (人文學). The humanistic approach looks for understanding meaning, purpose, and goals which might be the way to truth, happiness, and value. However, natural science focuses on explaining or uncovering the truth of the natural world or converting it to technology which means the generation of revenue. What I can suggest to Ebara is to seek a humanistic approach further on your EOI and EOL so you could not only secure the knowledge for business but also influence the society to learn the different paradigm in technology development. When I look up the mission statement and core values of Ebara, you already have the humanistic viewpoint in business. I would like to remind Ebara’s core values: **Balance, Communication, Accountability, Courage, Honesty, and Learning**. Are they learned from business practices? Yes, they are, but you should know that they are very humanistic. They could be achieved when one becomes very mature based on sound fundamentals and principles.

In the Bible, there is a saying 'It is more blessed to give than to receive.' It might be a right concept of Open Innovation. Open Innovation comes from how sufficient, happy and capable you are. Without the maturity and confidence, you can not open yourself. People or an organization seems to be very hidden or arrogant if they are not pursuing OPENNESS. I would like to propose Ebara to be the leadership in its OPENNESS and #1 company in its business, so you could prove OPENNESS is the right solution for employees and businesses. I wish all the best to EOI and EOL.