<u>A brand strategy of [heavenly maiden] to be an innovative major water company</u> **NET** NET Co. Ltd

The president Toichiro Koyama

1. At the beginning. What major water companies are?

The Beoliawater Co. employing 120,000 workers and the Suez-environment Co. started as a national company and later become private company established by the French government and UK government respectively about 100years ago to prevent pandemic of the plaque which occurred under the very bad environment of hygiene and underdeveloped industrial society. Since then both companies have been growing to big water companies in the world doing the national level projects.

Such method is effective as long as the society is undeveloped and this method was also effective before the World War Two in Japan.

But after the war, the society has been changed rapidly by a rapid growth of economy, high population growth rate, over population in big cities, and changing of life style.

Governments were not able to control by the old system, so implemented regulations such as water quality and total volume control over wastewater treatment.

Then free severe competition started in private market and new technologies have been developed to handle various wastewaters in hardware and software. During this competition, companies with low level technologies have been wiped out. Technologies also have changed from fixed bed method, rotating disk one, fluid bed one to membrane one. However Japanese big water companies have only been doing the public- work projects or big volume market and have never tried to attend industrial wastewater. Because water volumes are so low for them and complicated systems are required in this area. And the big companies have satisfied with the state of situation and didn't make technical progresses. They have tried to break in BOT (Build, Operation, and Transfer) market in the world but they got only ODA project from Japanese government.

They have also tried to break in the Chinese market with development funds supported NEDO (New Energy Development Organization) but failed because they could not follow rapidly changing Chinese government's policy. They targeted only specific area such as public sewage with one technology. They are not able to compete with Chinese rivals in the cost.

Recent change of the Chinese government policy which emphasizes to maintain the ecological system is very important for future Chinese environment which never mentioned before.

I think there are some effective cases of short-term ODA for demonstration plant build by customer's money or 100% repayment bond to spread out the **[heavenly maiden]** system.

2. Revolutionary effects of the [heavenly maiden] invented by NET

The **[heavenly maiden]** system has revolutionary effects which come from by actively inserting principle of the nature to the system.

NET has been developing many revolutionary effects which come from experience and technical development corresponding for over 450 customer needs during 20 years operation.

On the purpose to develop new system, NET has been cooperated with big company members, managing directors, universities, and foreigners studying in the universities, but nothing come out as a result. NET also carried out a wastewater treatment experimental asked from a university for a Southeast country. But after we submitted the report, no answer comes from the university. So such cooperation produced nothing.

NET hired two engineers, one of them was a division manager of E Company which one of big engineering company in Japan worked for 40 years, the other was a scholar of H Company also one of big company developing solid carrier for nitrification bacteria. Both engineers could not contribute to NET because they could not grow out from stereotype thinking which absolutely necessary to make new technology.

NET also hired two veteran sales staff, one worked for a big trade company, the other had worked in Chinese market for over ten years, but both of them could not sale BF but obstructed for sale because they could not understand the essence of the BF system.

The market share of industrial wastewater system was estimated 20 to 30% in total wastewater treatment market including public sewage system based on the sales volume of BF. NET tried to expand the sales volume but failed. Because NET had no effective marketing plan which textile industry took for granted. So NET understands well how important to make marketing plan and to follow it.

Almost of the employees resigned because they could not understand the essence of BF and unique rule of Chinese business. Remained four employees are excellent engineers and they have worked well making good homepage and good presentation documents. Since then it became possible to spread out the marketing worldwide.

During trying to expand sales volume, NET had invested so huge capital into trial and error that the company's financial situation had been worsened Industrial wastewater treatment for small and medium companies with bottom-up approach is very easy. But it is difficult for governments and top-ranking companies to handle such problem because their way of thought is dialectic not bottom-up. Such tendency is more common in China than Japan, so you need special route to get a project.

I think it is a myth that top-ranking companies can grab the foreign countries market by cooperation with Japanese government.

Another myth is about membrane treatment system. Mr. Sawa, the president SIGA University, said in his lecture that nuclear power stations had been believed in not only Japan but worldwide for years that it had absolute safety and no accident occurred. After the Tohoku Big earthquake, this myth has been broken and robustness on those plant should be required technically and systematically.

There are several types of membranes. Japanese government has believed in that Japanese membrane is top level in the world forgetting the fact that membrane system is easily blockaded. So the government and membrane makers have thought that they could break the trade barrier of foreign countries especially targeted Japanese companies operating in China and they got some projects. The Chinese government also believed in this myth and forced local governments to use MBR (Membrane Bio Reactor) entire China.

As a result, BF has been put out from the project even treatment cost in MBR is two yuan per cubic meter compare to 0.5yuan in BF system.

The top of the myth was smart city concept which translated as culture house but it was an anachronism in these days that satisfying to individual needs a priority matter. NET made proposal to be a better system changing MBR to BF. But authority ignored it.

This concept was only self-satisfaction of the Chinese government and GWRA (Global Water Recycling and Reuse System Association, JAPAN) and made meaninglessly time loss.

In industrial wastewater market, only K Company was able to make business to Japanese customers with state- of -the art technology for wastewater treatment for such as semiconductor and LCD (Liquid Crystal Display) in China. But it was not last long as Japanese companies in this area decreased. (NET received several order in this area from O Company and send BF to Taiwan. But O changed material from BF to fluid carrier because initial cost is cheaper than BF even BF has lower COL (Cost of Life). This was only case that BF was changed to other material).

NET withdrew from Dalian like flee by night forced by the absolute power of the Chinese government.

Even reclamation work completed for the sewage plant for sewage mixed with fish processing wastewater which former mayor of Dalian city planned to protect a fish farm and exiting space was too small to expand, but project has been stopped until now because of the smart city concept.

The growth rate in China became to a hibernating bear from faster than fly.

This influence of Government⁻ Government relationship still remains and resumption takes long time.

The theme of this A brand strategy of **[heavenly maiden]** is how to break this state of affairs.

3. Assemble of water major

Bringing BF system's ability into full play requires an organization which responsible from planning to completion. The industrial wastewater treatment in Japan is very simple as shown below as long as keeping regulation and every problem can be solved on the site and no need of authority's intervention. So this relationship naturally becomes WIN-WIN.

(B-C) (BEngineering company, CCustomer)

In the China, two other organizations shown below are involved.

As long as the government does not extend assistance, the relationship is shown below.

G-G-B-C (GCentral Chinese Government GChinese local government) From a point of view of separation between politics and economics, it is better not to involve the G

Much less, strengthening of regulations and penalty makes G and B avoid responsibility and try not improvement of technology. It may drive technology in reverse in Chana if Xi Jinping exercises authority over China,

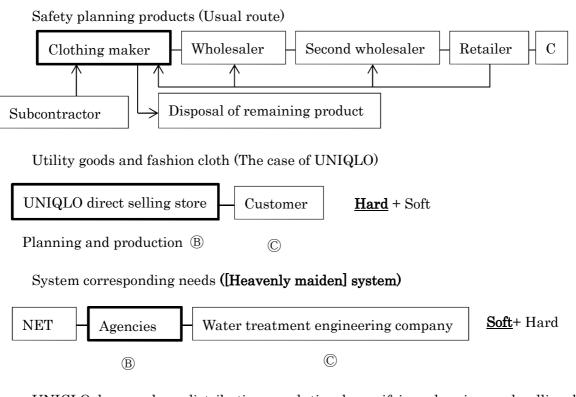
Industrial waste water treatment in China is in chaotic condition. It is fatal situation such as the occurrence of cancer villages.

BF system is good at industrial wastewater treatment if supported by technical team with knowledge come from results of Japan. If you want to involve to China's business,

there is possibility to gather chestnuts from a fire, so you have to carefully proceed watching a trend of regulations.

4. Business model

1) Comparison to UNIQLO



UNICLO has made a distribution revolution by unifying planning and selling but having difficulty of diversified and high-end products. BF can meet every request such as diversified and high-end products.

NET leaves selling **[Heavenly maiden] system** entirely to agencies, so that the ability to respond of agencies at the work site essential to expand the BF business. Spreading the strategy becomes very easy because functions are concentrated.

The **[Heavenly maiden] system** is more advancing system which can be used wide range of use with the principle of actively back to the Nature.

2) Comparison to automotive industry

After the world war Two, the textile industry had 65% of share in GDP. At that time Toyata industries cooperation, one of weaving machine maker, Suzuki woolen and worsted loom, Honda, Moped (motorized bicycle) maker, had forecasted next era, then changed their product to car. Both of TOYATA and HONDA invented the technology to pass the Muskie law regulated the quality of exhaust gas from car in USA respectively. Taking this opportunity, Japanese automobile industry has been growing greatly until now. It was well-known story that HONDA broke the scheme which top-ranking company was given priority made by MITI (The ministry of International Trade and Industry).

Reversion of Okinawa to Japan at 1972, many companies got subsidy from the Japanese government said in general [buy ropes and sell thread], but a company made the structural reform without subsidy and got in the sports clothing market. The company has become top-ranking company by riding the wave of sports promotion and this fact pushed the textile industry to the structural reform. This also connected to the success of UNIQLO.

At the above success, the innovative weaving machine played an important role. The machine was NISSAN water jet loom which developed by PRINCE car company. The PRINCE, a subsidiary of NAKJIMA Airplane Company, developed this machine as a side business because they could not sell the cars well. Later the PRINCE was absorbed to NISSAN, after that this machine became main product in NISSAN called NISSAN WJ.

Like that, Japanese government leaded industries adequately without disturbing free competition. And companies made efforts of structuring reform were appreciated properly at the market.

I myself was an engineer at the synthetic fibers processing company. I took part of developing new products and worked as a project manager for construction of a new plant. I fondly recall at the time I had the purpose of life. The time is past and I feel getting old. So it is old man's indiscretions.

5. Agency system

Agency system is effective to give full play of BF system's ability same as UNIQLO who has made a distribution revolution by handling from planning to retail.

In Japan relationship between ^B and ^C becomes spontaneously agency system, specialized to individual market, no competition between agencies, and pus in a happy dispensation of nature and materializes coexistence and co-prosperity.

In China, even \bigcirc - \bigcirc - \bigcirc - $\textcircled{B-}\bigcirc$ system, it can be avoid the problems that come from the market structure complexity by making clear rules to select agencies based on regional difference, customer needs, and others

You must avoid too much monopolize the agency, which prevent a free competition.

At the time of start, you should decide whether to do or not to do the project. If willingness of customer is open to question, the customer may have some trouble so that you don't push by force.

If you make a decision to do a job, it will be become easy to get excellent results by connecting four parties as mentioned above. The contradiction that happened at Guangzhou-city in China will be solved. This contradiction was that the design house in Guangzhou ordered to stop the project ongoing by the sponsorship of the environment protection department in Guangzhou, the reason why they stopped was rejection to new technology. Interference by the N environment Co. Ltd to inspect the Minami Gamo Swage Plant was out of the question.

6. Evolution to future (Only theme)

- ① Build up 13V system. Actively revolve to ecological system. Complete early 12V.
- ② Urban area. Integrate city and rural area, Resilience system.
- ③ Over all planning to China (South-North Water Transfer Project)
- ④ Improve living conditions. Improve morals of people about environment.
- 5 Push forward China + One. (ODA's support is very advantageous)
- G Japanese government should apply to [Environment Strategy Special Economic Zone]. Materialize water major company. Give full play of total power.

Rapid economic growth makes people unhappy. The fundamental policy of the government must be to materialize the rightful bright society.

The **[heavenly maiden] brand strategy** is based on this principle and goes on the noble road.

Summaries

- BF system has been developed by a small business company having same functions as a big company, has been sold 450 number of customers mainly industrial wastewater treatment system in Japan. So based on this results, NET has advanced into public sewage and foreign countries.
- 2. NET has met many risks caused by the E Company and H Company in China and in Japan and Chinese government and Japanese government. So BF production line has been stopped for three years, NET is facing bankruptcy with mountainous stock. Without relief measure from this situation, BF production team is facing of extinction because the textile industry is hollowing out rapidly unexpectedly in Japan.

- But above situation comes from outside, the real ability which has survived from fierce competition of industrial wastewater treatment market is still intact.
 By the agency system, avoiding risks of plant business and following the new Chinese policy which actively back to the nature same as NET, the [heavenly maiden] system will make it possible to achieve this policy.
- 4. By the remarkable competitive strength, innovative water major is able to environment purification and full use of water resources, so it will overcome the environment destruction arisen from rapid growth of economic. It is possible to increase living standard of citizens by promoting the low cost high efficiency system corresponding needs occurred from by region, by area, and by uses.