[Kibe-log]

Director Representative Executive Officer President and CEO Kibe Kazunari

^{#3} Why is it so important to disclose the cost of construction?

This is Kazunari Kibe, the president and CEO of INGRONEER Holdings Inc. Thank you for your visiting Kibe-log again.

In the future I believe that top level management will need to communicate to stakeholders and the people in a more direct manner.

What is "the cost disclosure method"?

In this post I would like to talk about "de-contracting" and the "cost disclosure method" which we have been promoting.

In general, it is still quite ordinary for construction companies to receive orders from the customer under the "contracting framework". Within this contracting framework, general construction companies would complete construction projects at a predetermined price that the contractee would accept through either open bidding or estimate submissions. The payment by the contractee is locked in and remains the same unless there are changes in the contract such as changes of design.

The contracting framework is convenient and beneficial to the contractees in Japan. The payment price is fixed when the contract is signed, and the completion of the building is guaranteed by the construction companies.

The shortest construction projects can take at least a year; however, most projects take several years depending on their size. During the lifetime of a project, construction companies risk exposure to the fluctuations in the cost of materials and labor. There are also quite a few unexpected issues that can occur after construction has begun, such as buried cultural artifacts found while drilling.

These unexpected additional costs are usually included in the contract price as a "cushion". This is a buffer meant to hedge risks that the construction company may be liable for.

If upon completion there are no additional costs, the cushion will become profit for the construction company.

On the contrary, with the "cost disclosure method", we disclose the target price and all costs that Maeda actually pays in real-time in the cloud. These include our construction fees, material costs, labor costs and construction specialist fees. This method is also called the "cost plus fee method" as the price in the contract includes the actual costs and fees. Through our own efforts, if Maeda is able complete the project at a cost lower than the estimated price in the contract, as an incentive to both parties, Maeda will share those savings with the contractee. If the final cost ends up being more than the estimate, Maeda will also share the extra expense pro rata as according to the contract.

There may be many corporate executives in our industry who are strongly against the "cost disclosure method ", as it discloses the real cost structure of companies including the cost of goods and services. In fact, most corporate executives in the construction industry are already reluctant to disclose their costs to customers.

But most costs such as material and labor costs are already publicly disclosed. If you want, you can find the cost of construction to some extent by using currently available information.

We decided to willingly disclose the cost of construction, thinking that it is important for Maeda to gain and establish trust from our clients through these disclosures with full transparency.

The corporates never trusted the estimated price.

I would like to turn back the clock to the early 2000s to explain the reason why we decided to adopt the "cost disclosure method".

I read a shocking report when I was in the Business Planning Department back in the early 2000s. It was a report of the results of the surveys to several corporate conractees in Keidanren (the Federation of Economic Organization) conducted by Nikkenren (the Japan Federation of Construction Contractors). I had an opportunity to read this report because the chairman of the Maeda Corporation, Matabee Maeda, was also the chairman of Nikkenren until 2001. I could not believe my eyes when I read the results of the surveys. There were feelings of distrust and doubt regarding the estimated prices submitted by general construction companies. The following is the partial summary of their responses.

"In the past we received an estimated price from a general construction company under the discretionary contract for our project. The estimated price was XXX Yen. Later on, the situation had changed and we swiched from a discretionary contract to an open bid. The same company that gave us the estimated price of XXX Yen under the discretionary contract, surprisingly lowered their price the second time by 30% in the open bid. This made us wonder what the real cost of construction is." – Major manufacturing company

"We want general construction companies to stop inviting us to dinner or golf or sending us seasonal gifts. They should instead lower the price. " – Another major manufacturing company

They continued to say, "Because construction companies will spend so much money trying to curry favor and build

favorable relationships, we need to periodically replace our employee in charge of ordering projects to avoid any possibility of favoritism."

I also felt a sense of danger about the dumping schemes which were commonly seen in the construction industry at that time. After the bubble economy burst, the budget for public works shrank in the long sluggish economy and we could not expect the orders to increase forever. However, people in our industry ignored this reality and kept using dumping schemes and this caused every company to decline in performance. Solving this issue was the biggest challenge of Maeda's Business Planning Department. There were no elements of differentiation among general construction companies, and this in turn caused the need for dumping schemes. The lack of differentiation was also the cause of structural problems for companies in the construction industry. The service of each construction company was commoditized and there was no other way to win the bid for a project except by getting into endless price wars.

Meanwhile, the results of the surveys of Nikkenren showed how poorly customers distrusted the murky pricing practices of our industry. Contractees did not trust estimated prices and they did not it like construction companies attempted to curry favor from their employees. I agreed with them and wanted to submit more transparent prices with margins that customers would find reasonable.

"The cost disclosure method" in the UK

Years later, from May 2004 to February 2005, I had an opportunity to attend the executive training program (currently "Fushiki-juku") hosted by Mr. Iwao Nakatani who is a prominent economist and the former president of Tama University. At the end of the training program, companies' executives were invited to hear a final presentation from the attendees. Each program attendee needed to present some suggestions for structural change of his/her own company. I studied overseas general construction industries for the presentation and decided to suggest a new contact method which was totally different from traditional contracting and more suitable for future markets. While researching I turned my attention to the "partnering contract method" used for public works in the UK.

The partnering contract method consists of: (1) open-book (cost disclosure), (2) cost plus fee, and (3) gain and pain. Gain and pain is the incentive (or penalty) derived from the difference of the estimated price in the contract and the actual cost of the construction. I had found similar contracts with the above three elements called GMP (Guaranteed Maximum Price) contracts in the US. I thought it was a very fair contract with full cost disclosures to the contractee.

Through this structure, contractors are incentivized to find ways to lower the cost of construction for their customers. With some modifications in regard to Japanese business laws and customs, I presented a suggestion of structural reform using my research of these partnering contract methods.

Honestly speaking, the executives from Maeda at the time were not happy with my idea. However, thanks to the high praise from the executives of other companies and the younger Maeda employees, executives from Maeda began to think more positively about my suggested reforms. This could only have happened thanks to the encouragement from all the other attendees.

In September 2005, Maeda officially to introduce the "cost disclosure method". Since then, the accumulated orders under the "cost disclosure method" has exceeded 20 billion yen. Maeda even acquired two patents with regards to this method (We do not collect patent fees!).

The "cost disclosure method" often causes an overload of work for conractees as they need to discuss all expected costs beforehand. Nevertheless, this new method has gradually come to be recognized as a viable replacement for traditional contracting. It was adopted for the reconstruction of the Great East Japan Earthquake and brought in the bid contract by the MLIT (Ministry of Land, Infrastructure, Transport and Tourism).

For your information, as a member of the research team organized by MLIT I had an opportunity to learn about the order systems in the US and the UK in February 2007. When we visited Arup in UK, a world known construction engineering company, I was surprised when I learned of the origin of the partnering method in the UK. It was the order system of Japanese public works. Here's the story I heard.

In the UK in the 1980s, the increasing cost of public works was a big problem. The UK government found the attorneys' fee for the legal action against the design changes or delayed construction period inflated the cost of public works. When the UK government studied the order system of public works of other countries, they were astonished by the outstanding order system in Japan. They learned that almost all construction projects were progressing on schedule within the budget and with better quality. How could that be possible?

At first, they thought the only cause was collusive bidding at the initiative of government agencies. But upon further study, they found that the trust between contractors and contractees made this impossible possible in Japan. So the UK government tried to build trust by shaping the contract and incentives and finally reached the partnering contract method. The system of Japanese public works is the model of the partnering contract in the UK.

What is in common between de-contracting and the "cost disclosure method"

As I mentioned previously in Kibe-log, for last 20 years as a member of Business Planning Department, I have been taking a trial-and-error approach to seek for the way to change the traditional business model in our industry to a more innovative

one. We need to change our business model because Maeda is not a super general contracting company for the number of orders that we receive. In short, Maeda is in the second-tier group of the construction industry.

If the market begins to shrink, Maeda would feel the impact immediately as its size is smaller than the super 5. In order to survive in such a situation, we have no choice but to listen to the market and keep innovating with new initiatives. While the progress is still slow with "de-contracting" such as the investment on the infrastructure and "the cost disclosure method", I believe we are on the right track. As part of the executive management, I am responsible for explaining our new model for the construction industry and for continuing to research possible new reforms. I highly appreciate your continuous support. Thank you.