

## Foreword

### Thoughts on Innovation

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Magazines and exhibitions in recent years spotlight severe competitions among communication businesses, cutthroat battles by hardware, software and application companies, smart community, smart house and other information communication related issues, and we often encounter the word “innovation”.

Komatsu's products, on the other hand, mostly depend on the experience engineering, and we had seldom associated the word “innovation” with our products until recently.

Today, however, innovations that would change the business model by KOMTRAX, AHS and other information communication technologies are happening even in this world.

It is said that innovations come in two types, sustaining innovations for improvement of conventional products and destructive innovations that create a completely new value. KOMTRAX and AHS are destructive innovations in a sense.

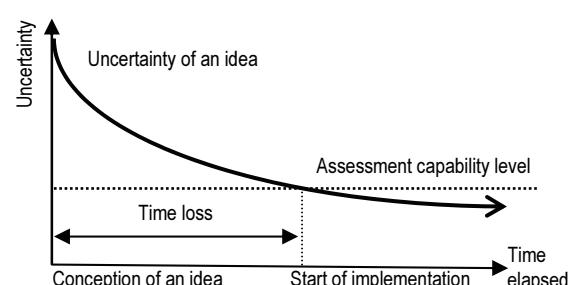
There is a phrase, “time loss taken to put an idea in practical use and resulting failure”. An idea with a possibility of destructive innovation is highly uncertain at first, and the members of the organization concerned to that idea lack the capability to assess the value at that point of time. When time elapses and uncertainty subsides, and when the assessment capability of the members becomes comparable to the idea, the organization finally implement the idea. This, however, causes a long time loss and allows others to precede (**Fig. 1**). In order to remove this time loss, it is necessary to reduce the uncertainty at an early stage, and for that purpose:

- (1) “Do it anyway!” (learning by implementation), and
- (2) “Launch it in the market early!” (learning by exposure)

The above must be important in innovating the business models for construction and industrial machinery by information communication technology in particular. It may be reproved to say we cannot tell until we try, but we learn much from trying. It is necessary to try in order to be ahead of others.

Sustaining innovation that is often regarded negatively in comparison with destructive innovation is also extremely important for manufacturers. We have learned in the past experience that when we sustain and pursue one technology, we would be able to achieve significant cost reduction and improve performance and durability, and create a condition that may be regarded as innovation in a long run and sometimes we find the unexpected accomplishment.

Rome was not built in a day.



**Fig. 1** Time loss taken to put an idea in practical use