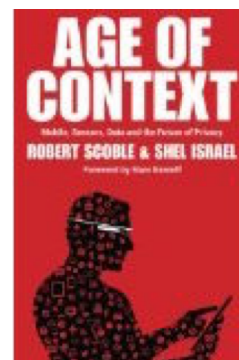# SPACE JAPAN BOOK REVIEW

From a satcom researcher point of view
Reviewer: Takashi Iida, Editorial Advisor

Robert Scoble and Shel Israel: "Age of Context", Createspace, 2013.

This book has no direct relation to the satellite communications because this book is on the software related to the Internet. But, this book is appropriate to review in this column, because a future topic of the Internet such as Web2.0 is in the field of view of the journal of Space Japan Review. Furthermore, the book contains a tale nearer the interest of the journal, as described later. I, the reviewer of this column, introduce this book involving some of my opinion below. This book review is based on Japanese translation version of this book.

Robert Scoble, the author of this book (titles abbreviated, hereinafter the same), was born in 1965 and dropped out without finishing his degree in Journalism from San Jose State University's School of Journalism and Mass Communications [1]. After he joined to Microsoft, he is now a world famous technology journalist and works for Rackspace. He travels world to look for cutting age technology and takes interview to several thousand of managers who lead to innovation. He opens the result of the interviews to the TV programs and various social medias. Shel Israel was born in 1944 [2] and is active as a writer, a PR consultant and a coach of presentation. He contributes frequently to the magazine such as Forbes and Business Week. He also gives many presentations in the world.

Well, when the computer is advanced and information from many sensors is put to the computer, what happens? This is a contextualization. According to the back jacket, the companies in Silicon Valley have already handled the contextualization. We should not miss this movement. So, what is "context"? The "context" is just context and means "Before and after the circumstances, background". When the computer knows the status of user and background, it provides most desirable service for the user accurately and immediately. An example of the service is that the hotel provides a preferable room of the user estimating from the user's data, when the user arrives at the hotel. If so, what is the relationship between context and artificial intelligence? I images that the artificial intelligence is one of methods improving the context service.

This book introduces many examples that the software developed by the five technologies of mobile, social network, big data, sensor and position information as components of context is applied to the business. If these five technologies are improved and information put into computer is increased, the context service would become advanced.

At first, the contextualization of the car is discussed. Sensors in the car play a major role in theft prevention and safe driving. It is considered that the service such as position of seat and mirrors, preference radio station and restaurant guide can also be performed as accumulation of knowledge of the user. Furthermore, the autonomous driving is described a lot. When the context is advanced, automatic operation to the destination is conducted and the user will be only just ride without doing anything. Incidentally, concerning a context, the author of this book is set a smart phone as an information hub, while the automobile side is thinking of automobile as the hub.

Reading this book, I thought that car sharing would be promoted since the users need not possess their own car. Further, any car need not to be used only for reaching the destination. In fact, this book describes that the automobile use of the next generation might be divided into two forms: one is the person who selects the autonomous car and another is one who selects the life without car. In addition, the autonomous car has good fuel consumption and is likely to fit the environmental regulations well. The idea of new urban is created from such a background. The people of new urban change the city by using the context technology. They promote to make the road safe and to reduce the pollution. They move by subway or bicycle without having automobile. And they have moved to a city that had been abandoned, such as Pittsburgh and Detroit. It has become a symbol of significant trends that are accelerating the transition context era. New urban faction has received

a benefit from life of the technology and takes the initiative in the rebuilt city that planned by the technology underlying the context of the design. The number of people will reach several tens of million, and is still growing. Mobile devices with sensors, big data, position information and social network are indispensable for the new urban to do work, parenting, transportation, shopping, contact, education and health care. They give even impact to the future government and politics.

The medical and health care are a field that context is also active. Especially wearable sensor is active in the field to try to keep the health by collecting and analyzing personal data. The context type technology is the best helper. The management of diabetes and treatment of asthma promote health by collecting and managing data using the wireless device including a wearable one.

In particular, the information obtained with the wearable device dramatically increases as its number increases. Utility of Google Glass is described as an example. This is a device for consumer that first adopted monitoring technique the movement of the pupil of the user. It is a device to know what and where the glass wearer watches and by matching the position information. So, Google Glass is a device that has a very large number of possibilities. It was successful that it draw attention by stirring up fear and anxiety of some people. It is written that the Google Glass is prohibited to be used in some cases. It is written that we must not be able to imagine a time when we lived without Google Glass. If the user continue to use the Google Glass, it learns the behavior pattern of the user and predicts as a personal assistant what going to do from now, what wants to know, what to buy. However, the tendency to hate to be collected information in secret have been described. The Google Glass itself is ceased to sell to the public in 2015 [3].

The fact that contextualization is progress means that the computer is to know everything about the user. Then also it happens things other than. As an example, it introduces a case that a personal context assistant software called Google Now made a serious infringement to the user's privacy. When a man keeps in touch with a woman, Google Now have conveyed the women's private information to the man without request, based on the software's selfish assumption that the man and the woman are in the deep relationship. In order for the user to trust the Google Now, it is necessary to demonstrate that the risk of leak the wrong personal information by the software is much less than the risk by a human assistant. In the chapter of the end part of this book privacy problems are discussed and it is described that openness and transparency are necessary.

In the end chapter, context technologies in 2038 is described. Read the book. Among the description, it is described that the launch for Mars colony is begun. As mentioned earlier, this will be directly connected to the concern of journal.

In addition, Nikkei Shimbun Book Review [4] would be helpful. Further, As an example of the successful use of big data in the translator afterword of this book, Reference [5] is cited. Since this reference is reviewed in the previous column of this [6], it would be happy if you refer it. Finally, although this book does not described, if the information is collected from wearable sensor through wireless communication, the international standardization of the radio communication is necessary. I will close this review by adding that this issue is active in the group of IEEE802.15 [6].

References
[1]   https://en.wikipedia.org/wiki/Robert_Scoble
[2]   https://en.wikipedia.org/wiki/Shel_Israel
[3]   http://www.businessinsider.com/google-ends-sales-of-google-glass-2015-1
[4]   Hiroyuki Fujiwara: "'Age of Context' by R.Scoble and S.Israel 'Heavy storm' of new IT technology changing society", Nikkei Shimbun, Nov.9, 2014.
[5]   Nate Silver: "The Signal and The Noise —Why So Many Predictions Fail-but Some Don't", Penguin Press, 2012.
[6]   T.Iida: "Space Japan Book Review From a satcom researcher point of view 'Nate Silver: "The Signal and The Noise —Why So Many Predictions Fail-but Some Don't", Penguin Press, 2012"', No.88, Feb/Mar/Apr/May, 2015, http://satcom.jp/English/e-88/spacejapanbookreviewe.pdf
[7]   https://standards.ieee.org/findstds/standard/802.15.6-2012.html