Keynote Speaker

Japan's Challenges Toward Digital Transformation, the Opporrtunity & Issues

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Abstract

The dawn of the IOT originated in the POS system which was developed and proposed in the 1970s and 1980s, and the major Japanese convenience store chain has been popularized. In the early 2000s the interest in utilizing the Ubiquitous network and M2M increased, following the development of Isuzu's "Mimamori (watching over)" system which combines vehicle condition and GPS position information to improve service, Komatsu and GE tracked after selling their machines followed the development of a possible system. German Industry 4.0 Platform announced in 2013 is not limited to after sales (downstream) of things, but through all processes including upstream (development/production/preparation), midstream (production /manufacturing/procurement) etc. utilization of information based on CSP: Cyber Physical System.

Subsequently, Europe, the United States and China focused on constructing an information infrastructure that acquires a large amount of information, such as sensing/deep learning/pattern matching that learns known phenomena at the manufacturing site, and automates complicated algorithm. The manufacturing site imitates the past cases of specific companies' success stories, carries out the latest automated machines, and realizes automatic optimization of maintenance from the reference of behavior patterns and past information. Germany & US are accelerating the battle for the position of the next-generation IoT platformer. This is because the user can reproduce the manufacturing level of the same level with time and known pattern learning determines the accuracy and diversity of the user's information accumulation.

Meanwhile, advanced companies in Japan are trying to figure out how to utilize the experience and know-how accumulated from the past in the era of digitization, and whether it can be advanced. We focus on rebuilding local human resources/industrial base which can cooperate with empathy and empathy overseas with the creation process of 'value/organization/associate' mainly human being. Turning to the difference between Europe/US and Japan, I will try to describe the opportunities and challenges of Japan's digital transformation while referring to the past Digital Meister Project.