General-Purpose Artificial Intelligence: Revolutionizing the Productivity, Happiness and Economy

Kazuo Yano
Research and Development Group, Hitachi, Ltd.,
1-280, Higashikoigakubo, Kokubunji, Tokyo 185-8601, Japan

This talk introduces the world-first general-purpose artificial intelligence [1-4]. Its name is "H". The AI, added-on to a general system, makes the system to learn and grow autonomously. It has been applied to over 57 use cases in 14 domains to enhance business outcomes. Unlike the conventional computational system that works as is programmed by the human, AI-based system inputs the objective by the human, i.e. the outcome to be pursued, to discover the actions for enhancing the outcome, autonomously, using the massive data. This means that what AI achieves strongly depends on the designated outcome by the human. AI research needs to emphasize what outcome is achieved by the AI, in addition to how the outcome is achieved, i.e. the conventional AI research. Using physical acceleration data from wearable sensors combined with questionnaires, we have discovered that the collective happiness of people is quantified by sensor data [5,6]. It is surprising that the signal of happiness is encoded in the diversity of physical motion. The correlation is as high as r=0.94. By combining this collective-happiness index with the AI, we have confirmed that the happiness and productivity of people, such as in a call center, a retail store, and a development project, are enhanced [6-9]. Because such services are operated by part-time workers, their productivity is supposed to depend on the skill of the workers under the fluid job environment. However, the productivity, in fact, is strongly influenced by the collective happiness of employees. This shows that enhancing the capability of people is not achieved by just a transfer of knowledge or skill, but, in fact, is closely related to collective happiness of people. Now we can enhance the happiness and productivity of people systematically with general-purpose AI and big data. This has a profound impact on the economy and policy making of nations.

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