



Kyocera IR Day
(Held on November 29, 2018)

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< Cover >

Today I would like to explain the progress made in areas that we are working on aimed at driving mid- to long-term drive as well as our future direction.

<1. Basic Policy for Business Growth >

This slide shows our basic policy for business growth.

As I have explained in the past, Kyocera is working to strengthen management foundations with the aims of achieving 2 trillion yen in sales revenue and a profit before income taxes ratio of 15% in the year ending March 31, 2021 through such means as initiatives to double productivity and generate synergies both inside and outside the organization.

Pages 2 to 4 of the handout provide a summary of the efforts I have undertaken since being appointed president in 2017.

<2. Enhance Management Foundation (1) >

First, Kyocera is making aggressive capital expenditures. In particular, we are bolstering production capacity, mainly for products manifesting strong orders, with the objective of expanding existing business. We are currently building a raft of new facilities in Japan and overseas, beginning this fiscal year and running into next fiscal year, and we project 110 billion yen for capital expenditures for the current fiscal year, which is a record high.

<3. Enhance Management Foundation (2) >

Second, we are strengthening competitiveness by leveraging state-of-the-art technology. We are currently striving to double productivity and reduce costs on a Company-wide basis mainly through the establishment of our AI Laboratory and Robot Utilization Center as well as the promotion of a business innovation project. In production, we have already set up model lines that make use of artificial intelligence (AI) and are looking to deploy these lines in each division in a step-wise manner.

<4. Enhance Management Foundation (3) >

Third, we are creating new businesses by strengthening internal synergies and external collaborations. In particular, we are making efforts to bolster our R&D structure and have created a cross-organizational system for each theme. In line with this, we project R&D expenses for the fiscal year to amount to 70 billion yen, an increase of 20% compared with the previous fiscal year. In addition, we increased the number of personnel engaged in R&D in the first half of this fiscal year by 35% compared with fiscal 2015.

That completes my review of efforts to date.

Next, I will explain initiatives to drive mid- to long-term growth.

<5. Challenges to Achieving Mid- to Long-Term Growth>

On this slide we have summarized recent trends in the industry and social conditions.

At the top of the slide, we have outlined the impact of changes in technological trends in particular on business. Technological innovation continues apace toward the proliferation of the Internet of Things (IoT), AI and advanced driver-assist systems (ADAS), etc. Further, companies have been working to develop technology and create markets on their own or in collaboration with other companies in the same industry, and there are now a number of businesses being created that transcend traditional barriers in industry and technology.

In response to these changes, Kyocera must accelerate innovation in productivity and expansion of business fields to offset difficulties in advancing growth via conventional business development. It is necessary to push reforms in manufacturing and create business by making full utilization of AI and the IoT.

The bottom of the slide shows general trends in society. In addition to the pursuit of economic growth, society demands response to environmental and energy-related issues, including clean energy. Although in the past companies were generally evaluated in terms of growth based on performance, nowadays the market calls for new added value and the creation of a new business model.

Over the years, Kyocera has sought to expand its environment and energy business, and going forward, we will make earnest efforts to create an energy solutions business.

I will now explain each specific initiative.

<6. (Cover) 1. Reform manufacturing and create business by using AI and IoT>

First, I will explain our policy to reform manufacturing and create business by using AI and the IoT.

<7. Enhance Production Efficiency through AI and Line Automation >

This slide shows examples of efforts in two business divisions.

On the left is an example of initiatives in the production division for fine ceramic parts. We are striving to enhance manufacturing efficiency by way of a promotion project that includes production and technical development divisions, Kyocera Communication Systems Co., Ltd (KCCS) and external hardware and software makers in addition to a model business division. Specifically, we will promote automation using AI and robots to link production scheduler, operating system, and data collection and analysis system. At present, we have introduced two model lines where we are conducting verification tests. We can confirm that this has enabled us to reduce personnel to one-fifth in a certain division and boost utilization rate by 1.5 times in another division relative to the past.

The right side of this slide provides examples at Kyocera Document Solutions Inc., which produces printers and MFPs. We have established new facilities for this company both in Japan and abroad with the aim of boosting production capacity. We have introduced cutting-edge production equipment that utilizes AI and robots at each site, realizing labor-saving lines.

We have started operating fully automated lines at the Tamaki Plant, which produces toner containers, and at a plant in China producing OPC drums, a core component in printers and MFPs, which has resulted in production lines requiring just one-tenth the number of personnel compared with before.

We aim to double productivity by deploying the results of these initiatives across the entire Group.

In addition, Kyocera is trying to make full use of the IoT at manufacturing sites as a means to further strengthen competitiveness.

<8. Boost Competitiveness by Promoting Factory IoT Project >

This slide gives a general overview of our Factory IoT Project. At left, you can see the Company-wide schedule. We are currently creating and introducing a platform ahead of the start of verification tests at large-scale facilities planned for next fiscal year.

At right, you can see a schematic outline of the platform. We will introduce Kyocera products such as IoT units for data collection into production lines and factory infrastructure while also leveraging AI to visualize status and enable large-scale processing of data in such areas as equipment operations, production amount and quality. Through this, we aim to realize production innovation using data rather than the traditional model of manufacturing reliant on people.

Next, I will explain initiatives in the automotive market as an example of creating business through the use of AI and the IoT.

<9. Connected Car Solution Proposed by Kyocera>

In terms of business in the automotive market, we have mainly been explaining the deployment of automotive products through our proposal for a concept car, as shown in the upper left of this slide. We are working to enhance functionality and convenience in our AI recognition camera modules, which include a learning function based on deep learning, our center information displays with built-in haptic technology and other areas.

In addition to introducing these products, we will also actively take advantage of business opportunities for infrastructure systems in the automotive market. We plan to develop a unit and system with V2X compatibility for use in traffic infrastructure systems such as road measuring machines and to enter mobility service such as the Mobility as a Service (MaaS) in earnest.

<10. (Cover) 2. Establish energy solutions business>

Next I will explain efforts to establish an energy solutions business.

<11. Rising Awareness of Environment/Energy Issues>

Adoption of the new Paris Agreement to tackle global warming at the 21st Conference of the Parties of the United Nations Framework Convention on Climate Change (COP21) has led to calls for a reduction in greenhouse gas emissions. Japan has stated a goal of reducing its emissions by 26% by 2030 compared with 2013.

In addition, the number of companies participating in the RE100 project (Renewable Energy 100% project) is increasing. This project is a global initiative that calls on companies to source 100% renewable energy across operations. Going forward, there are sure to be increasing demands on the corporate sector to respond to environment and energy issues toward realization of a carbon-free society.

Kyocera sees this market background as a business opportunity and is looking into the establishment of new business supporting the self-consumption of electricity based primarily on the solar energy business.

<12. Business Development Aimed at Self-Consumption>

As you all know, needs and earnings model have changed when comparing the start of the Feed-in Tariff (FIT) system with the present situation for both users and manufacturers. Further, there has been a significant shift in demand for self-consumption of electricity amid rising awareness of its use as a disaster-prevention measure and of COP21 and the RE100 project that I just mentioned.

As you can see in the center of this slide, Kyocera already offers from solar power generation systems to operating and maintenance services. Going forward, we aim to create a new business model to further expand and enhance each product and service in response to demand for the self-consumption of electricity while also reinvigorating the solar energy business.

We are currently looking into new business developments in collaboration with various companies that include power and communications companies. We are making preparations to enable us to explain our activities in concrete terms next fiscal year and beyond with regard to full-scale commercialization of energy-related business.

<13. Creation of VPP Solutions>

I will now explain our efforts with regard to the virtual power plant (VPP) as an example of an initiative in the energy business.

VPP is a system that uses power generated and stored in solar power generation facilities and storage batteries to create cloud-based distributed power plants made up of units of customers that have been grouped together, for the purposes of maintaining balance in energy supply and demand and enhancing efficiency.

This requires connection between a resource aggregator, which controls and manages distributed energy resources, and an aggregation coordinator, which bundles the power controlled by the resource aggregator and deals directly with the power supply and demand market, including general transmission and distribution operators. The aim is to combine resources dispersed throughout each region and generate power more effectively.

Kyocera is participating in a VPP test project as a resource aggregator. Our strength lies in our ability to swiftly control energy resources among consumers and at facilities through use of solar power generation equipment, storage batteries and IoT network to maximize use of renewable energy. Realization of a VPP business is expected to enable the full-scale deployment of a solutions business covering from a traditional sales model for panels, to combination with storage battery, and service and maintenance business related to power demand and supply.

That completes my explanation on efforts to establish energy solutions business.

<14. (Cover) 3. Aggressive investment to expand business>

To conclude, I will explain investment activities toward future business expansion. Kyocera intends to prioritize investment for future business expansion based on cash equivalents already held.

<15. Capital Expenditure>

First, we will invest through capital expenditure.

As I mentioned at the start of my presentation, Kyocera is currently working to bolster production capacity at production sites in Japan and overseas. In addition, we plan to actively make IT- and environment-related investment in new facilities as well as existing sites in line with the promotion of factory-based IoT, in particular. By doing so, we seek to expand business and enhance efficiency.

To achieve this, we have earmarked over 100 billion yen for capital expenditure to be outlaid from next fiscal year and beyond.

<16. R&D>

Second, we will invest in R&D.

This slide shows an example of this with the Minato Mirai Research Center, which was explained in the financial presentation last month. We will continue to reform and strengthen our R&D structure, as with the establishment of this center, to speed up new business creation.

R&D expenses for the fiscal year are projected to amount to 70 billion yen, with this figure set to grow from next fiscal year.

<17. New Products Development, M&A>

On this slide, you can see the new products that are expected to make a contribution to business going forward. This fiscal year we have earned strong evaluations in such areas as Amcenna, a small, thin antenna, which is a key device supporting the spread of the IoT, and Aquala surface-processing technology contributing to longer life of artificial hip joints. In addition, we succeeded in developing a new device in a relatively new field for Kyocera, namely the life sciences field. This device utilizes printing device technology to automatically separate specific cells from blood and measure concentration.

In this way, we will push ahead with initiatives to increase development items and realize their practical application, which will also include external collaboration.

Finally, let's turn to merger and acquisition activities. We secured five new projects last fiscal year that will generate revenue of 100 billion yen. We are also currently pushing ahead with several projects and we will continue making efforts to strengthen existing businesses and expand business domain.

Cautionary statement

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