

Changes in Organization and External Environment

The external environment surrounding many companies is experiencing major changes due to the progression of globalization and changes in social issues. Organizations, too, must build management and governance systems that can address these changes in a flexible manner. The HCM Group will work to correctly understand the changing times and reflect this knowledge in decision making regarding management strategy.

Changes in society

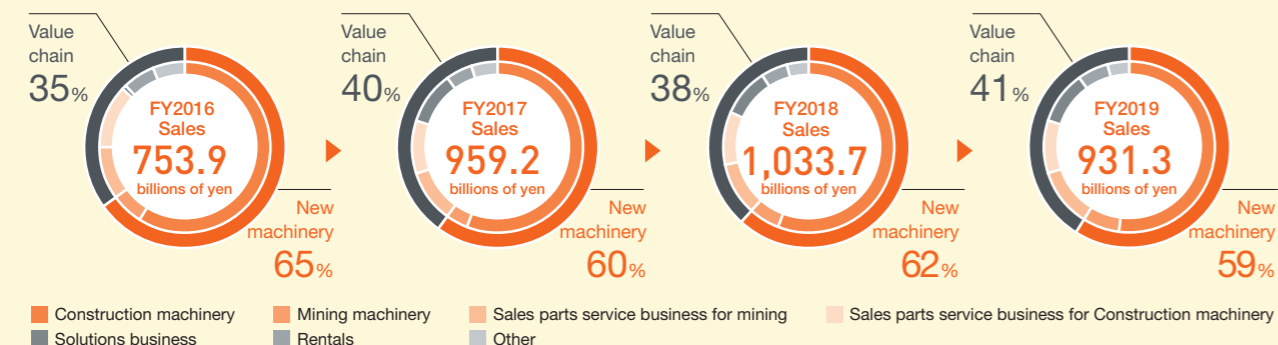
Mega trends	Impacts on HCM	
	Risk	Opportunity
Labor shortages caused by declining birthrate and aging society →Construction workforce (Japan): set to decline about 44% by 2030 (compared to 2005) <small>Source: "Situation of Skilled Construction Workers" published by the Ministry of Land, Infrastructure, Transport and Tourism</small>	<ul style="list-style-type: none"> Increasing difficulty of technology succession Loss of human resources and difficulty securing human resources Occurrence of occupational accidents 	<ul style="list-style-type: none"> Increasing demand for automation and labor saving technologies Improvement of productivity using automation and labor saving technologies
Aging infrastructure in developed countries →Bridges at least 2 meters long (Japan): around 63% will be considered old in 2033 <small>Source: "Portal Site for Countermeasures Against Aging Social Capital" of the Ministry of Land, Infrastructure, Transport and Tourism</small>	<ul style="list-style-type: none"> Interruption of supply chain Market contraction from decline of regional economies 	<ul style="list-style-type: none"> Rising demand for infrastructure maintenance and upgrades
Rapid urbanization in emerging countries →Urban population as a percentage of total population (world): set to increase to 68% in 2050 <small>Source: "World Urbanization Prospects - the 2018 Revision" published by the United Nations</small>	<ul style="list-style-type: none"> Soaring raw material and commodity prices Soaring personnel costs 	<ul style="list-style-type: none"> Growing construction demand in Central Asia and Africa, etc.
Impacts of climate change →Increase in average temperature (worldwide): up to 4.8-degree increase by 2100 <small>Source: "Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report" published by the United Nations</small>	<ul style="list-style-type: none"> Stoppage of operations due to natural disasters Changes in industrial structure from transition to a low-carbon society Stricter environmental regulations in countries/regions 	<ul style="list-style-type: none"> Rising demand for Environmentally-friendly products/services Attracting ESG investment Lower costs from efficient use of energy and resources
Advancements in AI/IoT technologies →Construction site productivity (Japan): aim to increase 20% by fiscal 2025 <small>Source: "Improving Construction Site Productivity with i-Construction" published by the Ministry of Land, Infrastructure, Transport and Tourism</small>	<ul style="list-style-type: none"> Competitors expanding business and entering new segments 	<ul style="list-style-type: none"> Creation of innovation through partnerships with outside entities
Diversity of working styles →Telework implementation rate (Japan): 34.6% as of June 2020 <small>Source: "Opinion Survey on the General Public's Views and Behavior during the COVID-19 Pandemic" by the Cabinet Office</small>	<ul style="list-style-type: none"> Information leakages Dilution of internal communication 	<ul style="list-style-type: none"> Securing of talented labor force through improvements to working environment

Changes in customer needs

Customer needs	Background
From ownership to rentals/sharing	Following the greater complexity, sophistication, and diversification of construction projects, a growing number of customers are looking to streamline operations by renting or sharing only the necessary types of construction machinery when needed rather than owning these machines outright.
Operating support and automation technologies	There is growing demand for machinery that can be operated safely by operators with little experience, given the declining working population in developed countries including Japan due to declining birthrates and aging populations.
Operation management of work sites	There is growing demand for optimization of machinery operation and streamlining of work, such as loading and transport, in order to increase productivity at construction and civil engineering work sites.
Improvement of maintenance quality	There is a need to reduce downtime in the event construction machinery breaks down, expand inventory of spare parts for repairs to construction machinery, and minimize the maintenance workforce.
Response to environmental conservation	There is rising demand for environmentally-friendly products from the growing seriousness of global environmental issues such as global warming. In addition, there is growing demand for construction machinery compliant with the standards set out in environmental laws and regulations in each country and region.

Transformation of earnings structure

Given social trends and the changing needs of customers, we are now shifting from a business model focused on the sale of new construction machinery to one based on the value chain model targeting construction machinery in operation.



Organizational restructuring

We are in the process of significantly restructuring our main development and production sites in Japan as a measure to maximize global competitiveness following our long-term plan.

