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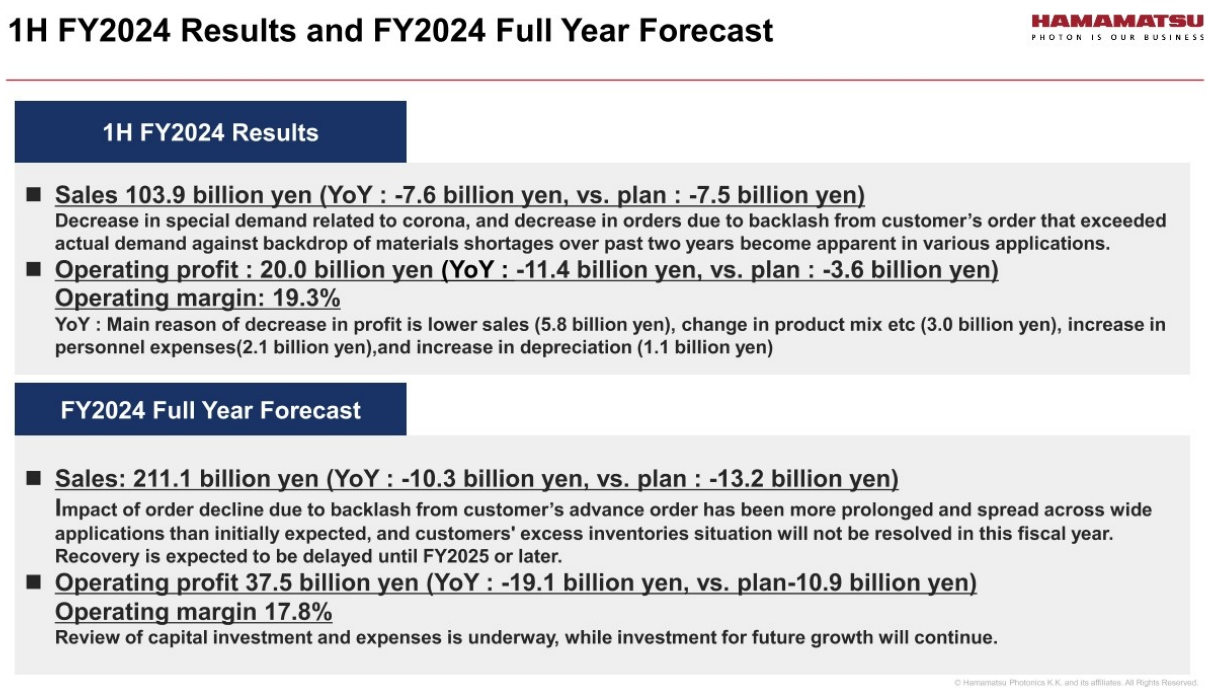
HAMAMATSU PHOTONICS K.K.

Q2 Financial Results Briefing for the Fiscal Year Ending September 2024



I would like to start with a key point: the results for 1H FY2024 show sales of JPY103.9 billion, down JPY7.6 billion from the same period last year, and down JPY7.5 billion from the plan.
There was a decrease in special demand related to the COVID-19 pandemic, as well as orders exceeding actual demand received over the past two years due to a shortage of materials. As a result, it has been difficult for customers to eliminate excess inventories, and a decline in orders has become apparent in various industries.
Operating profit was JPY20 billion, down JPY11.4 billion from the same period last year and down JPY3.6 billion from the plan. As for the operating margin, it was 19.3%. The main reason for the YoY decline was a decrease in gross profit due to lower sales, which amounted to approximately JPY5.8 billion. Also, the product mix has changed significantly: JPY3 billion. And the increase in personnel expenses was JPY2.1 billion. A significant portion of this increase is due to overseas expenses impacted by foreign exchange rates. And JPY1.1 billion for depreciation. These are the main reasons for the decrease in profit.
Continuing, here is our forecast for the full year 2024.
Net sales are currently projected at JPY211.1 billion. Unfortunately, the result is a JPY10.3 billion decrease in revenues compared to the previous year and a JPY13.2 billion decrease compared to the plan.
The elimination of excess customer inventory is taking approximately six months longer than expected. We also know that it is across a wide range of industries, and we expect this impact to continue through the end of the current fiscal year.

The recovery is expected to begin in FY2025. The current assumption is that the semiconductor market will recover firstly, and then the CT-related, non-destructive testing market will recover from 2H FY2025. We expect that the situation will remain flat with respect to dental and FA.

As for operating profit, it is JPY37.5 billion, a result of a JPY19.1 billion decrease from the same period last year and a JPY10.9 billion decrease from the plan, and the operating profit margin is expected to be 17.8%. Three months of the NKT Photonics acquisition has been factored in.

We are in the midst of a thorough review of capital investment, expenses, etc. However, for the sake of future growth, we plan to continue capital investment related to manufacturing and review their contents.

Summary of 1H FY2024 Financial results

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Decrease in sales and profit both YoY and vs.plan
Decline in profit margin due to lower sale

(Unit : billion yen)

	1H FY2023 (Actual)	1H FY2024 (Plan)	1H FY2024 (Actual)	YoY Change	YoY %	vs. plan Change	vs. plan %
Sales	111.6	111.5	103.9	-7.6	-6.8	-7.5	-6.7
Gross profit (%)	62.1 (55.7%)	57.9 (51.9%)	53.4 (51.4%)	-8.7	-14.0	-4.4	-7.6
Operating profit (%)	31.5 (28.2%)	23.7 (21.3%)	20.0 (19.3%)	-11.4	-36.2	-3.6	-15.2
Net profit	23.7	18.3	16.7	-6.9	-29.1	-1.5	-8.2

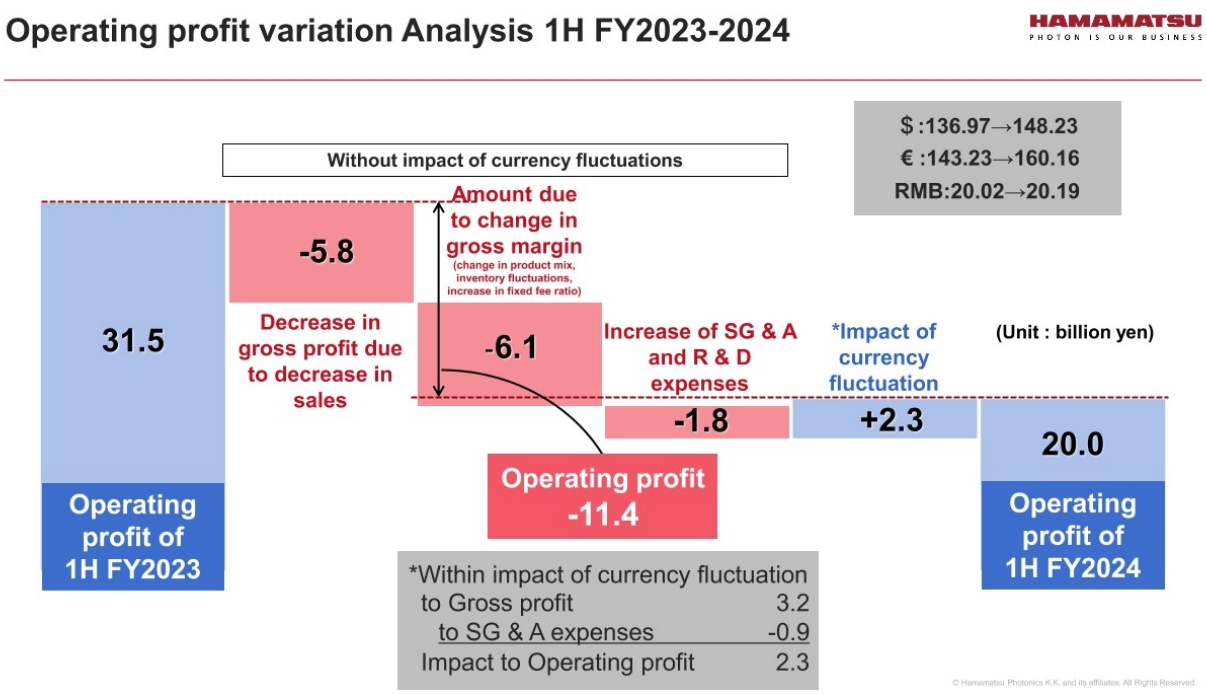
Exchange rate (Yen)				
	$1	136.97	135.00	148.23
	€1	143.23	145.00	160.16
	RMB1	20.02	19.50	20.19

FX sensitivity/Year (1-yen fluctuation)		Impact by currency fluctuation to operating profit
$1	0.3	2.3
€1	0.1	
RMB1	0.8	

The following is a summary of financial results.

The results were disappointing, with both sales and profits down from the same period last year and from the plan. The decline in sales has also had a significant impact on the profit margin.

The sales are JPY103.9 billion, operating profit is JPY20 billion, and net profit is JPY16.7 billion. Regarding the impact of currency fluctuations is approximately JPY2.3 billion in operating profit.



This JPY5.8 billion is the decrease in gross profit resulting from the decrease in sales, and the JPY6.1 billion decrease is due to the decrease in gross margin. This is due to changes in the product mix, inventory changes, and an increase in fixed fee ratio.

Sales by application

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(Unit : billion yen)

	1H FY2023 (Actual)	1H FY2024 (Plan)	1H FY2024 (Actual)	YoY		vs. plan	
				Change	%	Change	%
Medical-bio instrument	40.9	38.6	33.7	-7.2	-17.6	-4.9	-12.7
Industrial instrument	38.5	37.8	34.9	-3.6	-9.4	-2.9	-7.7
Analytical instrument	11.3	11.4	10.0	-1.3	-11.5	-1.4	-12.3
Academic research	6.1	8.5	9.0	2.9	47.5	0.5	5.9
Measuring instrument	4.8	5.1	5.6	0.8	16.7	0.5	9.8
Transport instrument	3.4	2.9	2.8	-0.6	-17.6	-0.1	-3.4

This is sales by application. The largest drop was in medical and bio instrument, with a decrease of JPY7.2 billion. Industrial instrument decreased by JPY3.6 billion, followed by analytical instrument with a decrease of JPY1.3 billion, and transport instrument with a decrease of JPY0.6 billion. On the other hand, there was a positive result of JPY2.9 billion for academic research and JPY0.8 billion for measuring instrument.

Sales by application（Medical-bio instrument）

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(Unit : billion yen)

	1H FY2023 (Actual)	1H FY2024 (Plan)	1H FY2024 (Actual)	YoY		vs. plan	
				Change	%	Change	%
Radiographic testing	27.1	24.0	21.0	-6.1	-22.5	-3.0	-12.5
Laboratory testing	12.2	12.2	10.5	-1.7	-13.9	-1.7	-13.9
Medical-bio instrument	40.9	38.6	33.7	-7.2	-17.6	-4.9	-12.7

Radiographic testing

- **For X-ray CT (YoY: -3.4)**
  Rise of Chinese CT makers in China and preferential policies for Chinese products make European and U.S. customers struggle.
  Demand decrease due to restrained capital investment by high interest rates in Europe and U.S.
- **For Dental (YoY : -2.1)**
  Demand decrease due to intensified price competition mainly in Chinese market, as well as curbs on capital investment by small and medium-sized clinics due to high interest rates in Europe and U.S. (excess inventories continue).

Laboratory testing

- **For PCR (YoY : -0.8), DNA testing (YoY : -0.6)**
  Special demand related to corona declined
- **For pathological diagnosis (YoY : +0.2)**
  Demand increase from Japanese medical institutions due to sales expansion as medical equipment.

First, in the Medical-bio instrument field, which saw the largest decline, sales of detectors for X-ray CT, fell sharply, by JPY3.4 billion.

The main cause is the rise of Chinese CT makers in China. This is a threat to our Western customers as well.

Western customers are also implementing countermeasures. We expect that our customers will recover again in the future.

The dental market has fallen sharply by JPY2.1 billion. Price competition is intensifying, especially in the Chinese market. In addition, high interest rates in Europe and the US are said to be a major reason why small and medium-sized dental clinics in particular are holding back on capital investment. And now the manufacturers have an overstock situation, which has not yet been resolved. As for laboratory testing, PCR and DNA testing declined by JPY0.8 billion and JPY0.6 billion, respectively, since the special demand related to COVID-19 has already subsided. Among these products, the NanoZoomer, a pathology slide scanner for pathology diagnosis, was approved as a medical device in Japan, and sales of this product have been aggressively promoted, resulting in a positive turnaround. This number is expected to increase in the future.

Sales by application (Industrial instrument)

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(Unit : billion yen)

	1H FY2023 (Actual)	1H FY2024 (Plan)	1H FY2024 (Actual)	YoY		vs. plan	
				Change	%	Change	%
Semiconductor instrument	22.6	20.1	21.3	-1.3	-5.8	1.2	6.0
Non destructive testing	10.4	12.3	9.3	-1.1	-10.6	-3.0	-24.4
Factory automation	4.0	4.0	3.1	-0.9	-22.5	-0.9	-22.5
Industrial instrument	38.5	37.8	34.9	-3.6	-9.4	-2.9	-7.7

Semiconductor instrument

- **For Wafer inspection (YoY : -0.3)**
  Market environment is recovering, but demand is declining due to inventory adjustments by customers, which is expected to gradually dissipate from FY2025 onward.
- **Stealth Dicing (YoY : +0.2)**
  Demand increase for HBM (High Bandwidth Memory) due to booming AI market

Non destructive testing

- **For Battery inspection equipment (YoY : -0.5), Electronic component inspection equipment (YoY : -0.1)**
  Demand decrease due to EV market slowdown, including termination of EV subsidies in China and other countries, and elimination of LiB makers and curbs on capital investment. However, original main market for electronic board inspection is solid.

Factory automation

- **For Encoder (YoY : -0.4)**
  Recovery is expected to be delayed due to unresolved excess inventories at Japanese customers (2-3 times normal inventories) as a result of lower demand for machine tools and other products due to slowdown in Chinese economy and a shift to low-priced products made in China.

Next, Industrial instrument.

In particular, with regard to semiconductor production equipment, the decline of wafer inspection was only small, at -JPY0.3 billion. This semiconductor manufacturing equipment market is now in a recovery trend. However, there is a slight decrease in demand due to inventory adjustments, but this is expected to be resolved after FY2025.

In addition, stealth dicing, a technology for cutting wafers, have been rapidly increasing. We expect the business to be quite strong in 2H of this fiscal year and into the next fiscal year.

As for the Non destructive testing market, the situation is still negative for battery testing with a decline of JPY0.5 billion. This is in response to the fact that EV subsidies are starting to be eliminated in many countries. The EV market is experiencing a significant slowdown. However, in the main markets of printed circuit board inspection, the microfocus X-ray source has been performing well, and the decline has been minimal.

Regarding FA, there was a large decline of JPY0.4 billion, especially for encoders. This is due to the slowdown of the Chinese economy, which has reduced demand for machine tools. With regard to low-priced products, there seems to be a trend of using Chinese-made products.

In addition, there is still a considerable amount of inventory left at the manufacturers, which is two to three times the normal inventory, so we expect a slight delay in recovery.

Sales by application（Analytical instrument and Academic research）

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(Unit : billion yen)

	1H FY2023 (Actual)	1H FY2024 (Plan)	1H FY2024 (Actual)	YoY Change	YoY %	vs. plan Change	vs. plan %
Analytical instrument	11.3	11.4	10.0	-1.3	-11.5	-1.4	-12.3

Analytical instrument

■ **For Liquid chromatography systems (YoY : -0.8)**
Demand decrease due to restrained capital investment caused by stagnation in drug discovery market

	1H FY2023 (Actual)	1H FY2024 (Plan)	1H FY2024 (Actual)	YoY Change	YoY %	vs. plan Change	vs. plan %
Academic research	6.1	8.5	9.0	2.9	47.5	0.5	5.9

Academic research

■ **For High energy physics experiments (YoY : +1.7)**
Shipments for Hyper-Kamiokande and CERN

Demand increase for scientific measurement cameras

In analytical instrument, sales of liquid chromatography systems were a JPY0.8 billion decline. In particular, we have heard that the stagnant drug discovery market has affected the companys by restraining capital investment.

On the other hand, in academic research, shipments of photomultiplier tubes for the Hyper-Kamiokande for high-energy physics have begun and are turning positive. In addition, shipments to CERN in Europe have begun, so sales have been strong.

In addition, demand is also growing for cameras for scientific measurement, such as the newly announced ORCA-Quest.

Sales by application（Measuring instrument and Transport instrument）

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(Unit : billion yen)

	1H FY2023 (Actual)	1H FY2024 (Plan)	1H FY2024 (Actual)	YoY Change	YoY %	vs. plan Change	vs. plan %
Measuring instrument	4.8	5.1	5.6	0.8	16.7	0.5	9.8

Measuring instrument

■ **For Geological exploration(YoY : +0.8)**
Despite geopolitical risks, oil exploration demand is strong, driven by high oil prices

	1H FY2023 (Actual)	1H FY2024 (Plan)	1H FY2024 (Actual)	YoY Change	YoY %	vs. plan Change	vs. plan %
Transport instrument	3.4	2.9	2.8	-0.6	-17.6	-0.1	-3.4

Transport instrument

■ **For LiDAR(YoY : -0.6)**
Demand decrease due to economic slowdown in China and delay in launch of automated driving market

Next, measuring and transport instrument.

As for measuring instrument, the high price of crude oil has been a strong favorable push, and photomultiplier tubes for oil exploration have been performing very well, resulting in an increase of JPY0.8 billion.

As for transport instrument, demand for LiDAR has not grown as much as expected due to the slow start of the automatic driving market. In addition, the economic slowdown in China has also had an impact, resulting in a slight decrease of JPY0.6 billion.

Sales by Region

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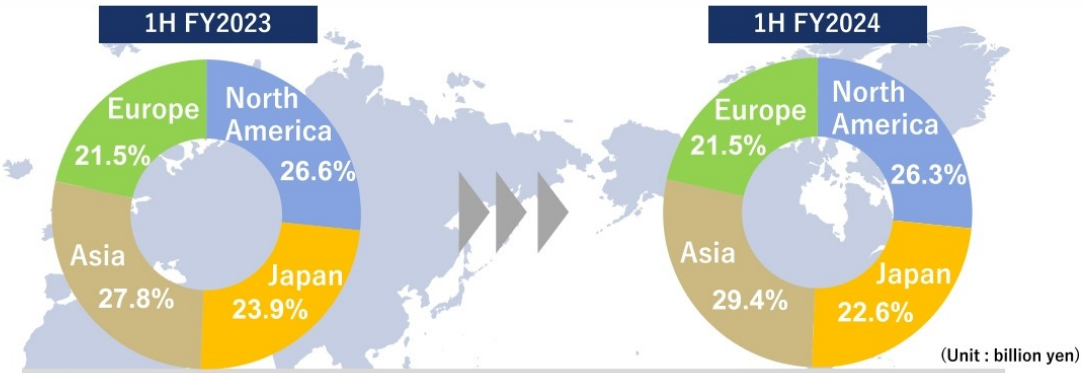

(Unit : billion yen)

	Europe	Asia (of which China)	Japan	North America
1H FY2023	24.0	31.0 (20.8)	26.7	29.7
1H FY2024	22.3	30.6 (21.5)	23.5	27.3
Change	-1.7	-0.4 (0.7)	-3.2	-2.4
Ratio(%)	*-7.1*	*-1.3* (*3.4*)	*-12.0*	*-8.1*

*Excluding other regions

Growth in China, which drove growth in recent years, become slow

Next, sales by region have not changed significantly in terms of composition. The four-division structure of North America, Japan, Asia, and Europe. Within Asia, sales in China have grown slightly. The Chinese market has grown considerably in recent years, but we now expect that growth will slow down.

Earning forecast

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Full-year forecast is revised downward due to prolonged and diverse effects of decline in orders received as a backlash from customer's advance order.
Recovery is expected to be delayed until FY2025 or later.

(Unit : billion yen)

	FY2023 (Actual)	FY2024 (Plan)	FY2024 (Forecast)	YoY Change	YoY %	vs. plan Change	vs. plan %
Sales	221.4	224.3	211.1	-10.3	-4.7	-13.2	-5.9
Gross profit (%)	120.0 (54.2%)	116.9 (52.1%)	107.1 (50.7%)	-12.9	-10.8	-9.8	-8.4
Operating profit (%)	56.6 (25.6%)	48.4 (21.6%)	37.5 (17.8%)	-19.1	-33.7	-10.9	-22.5
Net profit	42.8	36.7	29.4	-13.4	-31.3	-7.3	-19.9

Exchange rate (Yen)				
	$1	139.03	135.00	146.62
	€1	148.38	145.00	157.58
	RMB1	19.74	19.50	20.35

FX sensitivity/Year (1-yen fluctuation)	
$1	0.3
€1	0.1
RMB1	0.8

Impact by currency fluctuation to operating profit: **3.4**

The following is the forecast for the full year.

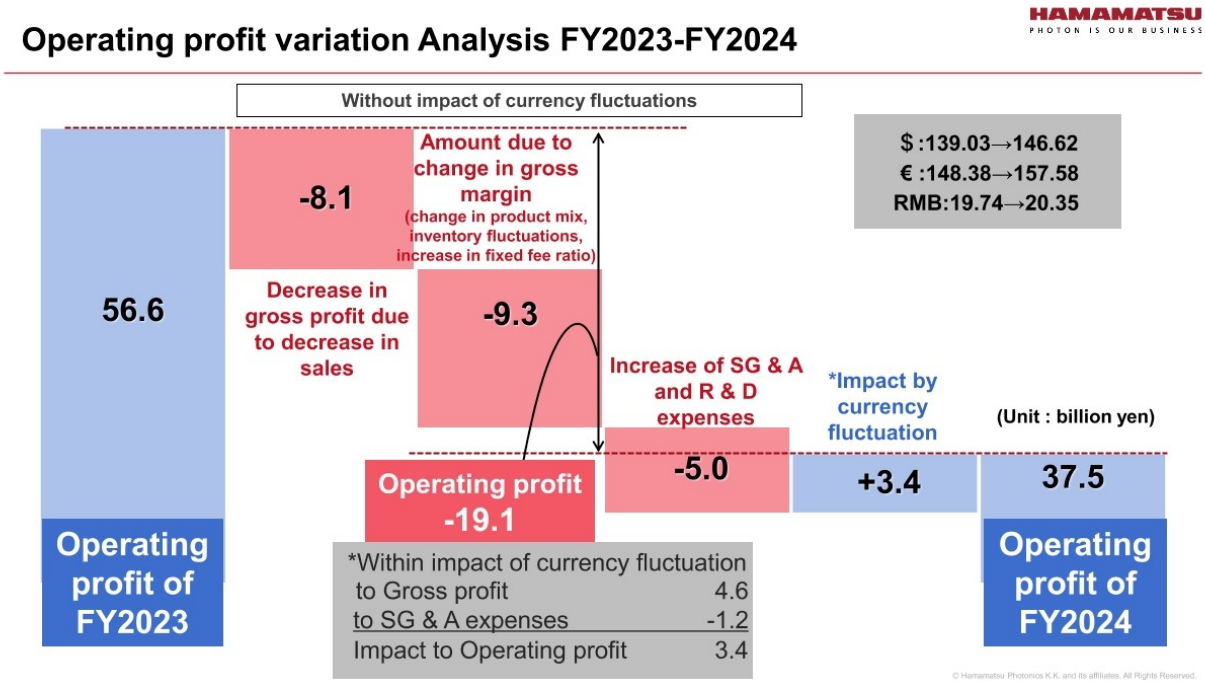
The elimination of excess inventory at our customers has been slower and more prolonged than expected, and this is spread across a wide variety of industries. We would like to revise downward our full-year earnings forecast.

Recovery is expected to be delayed until FY2025 or later.

Sales are expected to be JPY211.1 billion, operating profit JPY37.5 billion, and net profit JPY29.4 billion, a decrease of JPY10.3 billion from the same period last year, a decrease of JPY19.1 billion in operating profit, and a decrease of JPY13.4 billion in net profit. We make a downward revision to the forecast of lower sales and profits.

The foreign currency fluctuation impact is expected to be JPY3.4 billion in operation profit.

As for NKT Photonics, we have included their financials for three-month period from July to September.



As for Operating profit variation factors, these also did not change significantly from 1H, but the main reasons were a decrease in gross profit due to lower sales, and a decrease in gross margin due to higher fixed costs and other factors.

In addition, SG&A and R&D expenses have increased slightly, and since this includes SG&A, development, and amortization of goodwill for NKT Photonics, they are larger than originally planned. The impact of foreign exchange rate fluctuations is expected to be an increase of JPY3.4 billion.

Sales by application

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Orders continue to decline in many industries due to backlash from customer's advance orders
There has been no significant change of our position in key industries, and we expect to return to growth path in FY2025 as inventory excesses are resolved and market recovers.

(Unit : billion yen)

	FY2023 (Actual)	FY2024 (Plan)	FY2024 (Forecast)	YoY		vs. plan	
				Change	%	Change	%
Medical-bio instrument	78.1	77.3	67.5	-10.6	-13.6	-9.8	-12.7
Industrial instrument	74.4	77.9	67.5	-6.9	-9.3	-10.4	-13.4
Analytical instrument	22.5	23.5	21.3	-1.2	-5.3	-2.2	-9.4
Academic research	14.5	16.2	16.8	2.3	15.9	0.6	3.7
Measuring instrument	10.7	10.0	10.5	-0.2	-1.9	0.5	5.0
Transport instrument	6.0	5.9	5.7	-0.3	-5.0	-0.2	-3.4

As for sales by application, there has been no significant change from the situation just described. I would like to emphasize that our company's positioning has not changed significantly in this major industry.

Therefore, we expect to return to a growth path in FY2025 and beyond by eliminating customer inventories, resolving excess inventories, and allowing the market to recover.

For X-ray CT (Typical trend of major customer)

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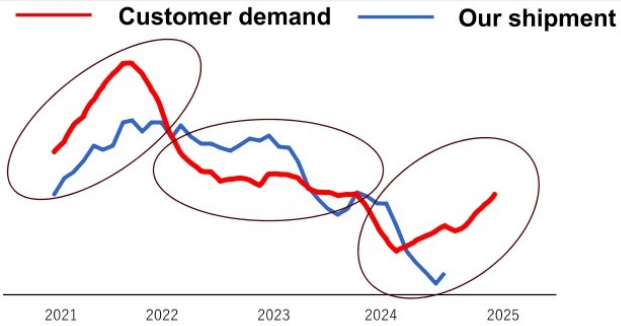
For X-ray CT

From 2021
Shipment could not keep up with rapid increase in demand for X-ray CT at Corona pandemic and continued to increase production.
From 2022 to 2023
In complete turnaround, excess inventory due to declining customer demand after Corona pandemic became apparent. Production adjustment continued.
From 2024
Bottoming out in 1H FY2024 and customer demand is forecasted to rise.
Recovery in normal trend is expected from 2H FY2024



This is the trend of X-ray CT.

After 2021, the demand for X-ray CTs increased rapidly due to COVID-19 pandemic. This meant that PCR testing could not keep up, and the measures of taking X-ray CT images of the lungs to diagnose the disease quickly became popular.

Also, because of the low-price X-ray CT could be sold to developing countries, etc., and CT manufacturers were initially quite bullish about increasing production of low-cost versions.

Our production was not keeping up with customer demand at all. Therefore, we repeatedly increased production in response to demand, but from 2022, the demand suddenly turned around and began to decline. We also made production adjustments, but due to various circumstances such as quantity contracts, we were able to maintain production to some extent while gradually reducing it.

This part was in excess of inventory, and that excess is now beginning to disappear starting in 2024.

According to the forecast we have received from our customers, the situation will reverse after 2024 and return to the situation before COVID-19. Therefore, we are currently considering whether or not to complete the production adjustment and prepare to increase production from now until 2025.

For Dental（Typical trend of major customer）

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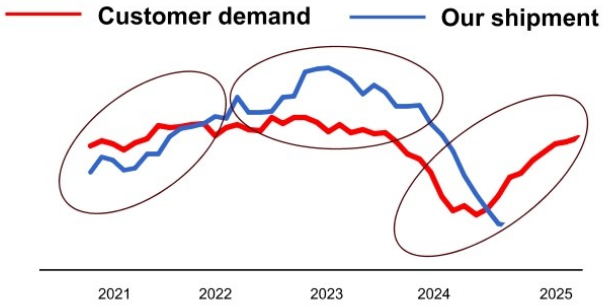
For Dental

From 2021
Production falls below demand due to shortages of electronic components and other materials.
From 2022 to 2023
We continued to increase production by responding to past customer requests for shipments, but excess inventory at customers became apparent due to sharp drop in demand caused by high interest rates in Europe and U.S. and intensified competition in China domestically.
From 2024
Demand appears to have bottomed out, but it is expected to take time to eliminate excess inventory.
Recovery is expected in future, but there are concerns due to intensifying price competition on manufacturer side.

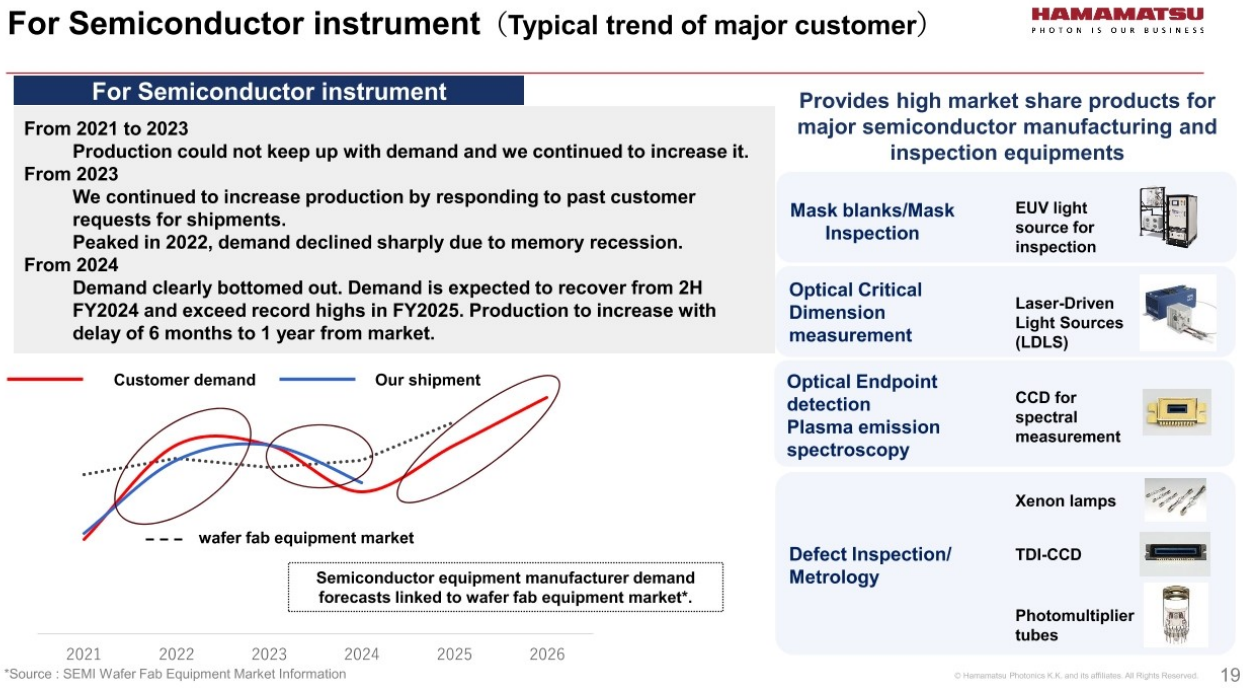


This is the trend of dental.

After this 2021, due to a shortage of components for our X-ray flat panel sensors, and we were somewhat unable to keep up with the demand.

We received orders ahead of schedule due to quantity contracts and have repeatedly increased production. However, customer demand did not grow as much as we had expected, and demand has dropped dramatically once due to high interest rates in Europe and the United States and intensified competition in China. With that, we also made production adjustments. However, we are still quite overstocked.

The market is expected to start up in 2H of 2025 or so, with a delay of six months or a year, using this inventory for the time being, although market is scheduled to be recovered.



Next, a major semiconductor production equipment manufacturer.

Since FY2021, the market for semiconductors and memory has been strong, which has led to increased demand for customer, and we have repeatedly increased production. But then, the price of semiconductors dropped, and the recession began, and customer demand dropped dramatically.

The forecast we have received from our customers is very bullish, and they are predicting demand that will recover from 2024 onward and reach a record high in 2025-6, surpassing the COVID-19 pandemic. We, too, will switch to increased production once we enter 2025, as we usually recover from our customers recover.

Information on the wafer fab equipment market also indicates that the market is expected to rise from 2024, and this rise is almost in line with the current demand of our customers.

In the semiconductor manufacturing process, there are EUV light sources, laser driven plasma light sources, CCD for plasma spectroscopic measurement, light sources, CCDs, and photomultiplier tubes for wafer particle inspection. Since we have high market share for these products, we expect that these related products will also grow significantly once the semiconductor market recovers.

Semiconductor Market Driven by AI

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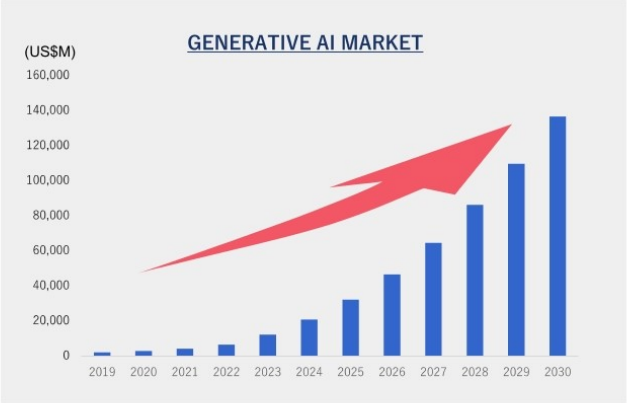
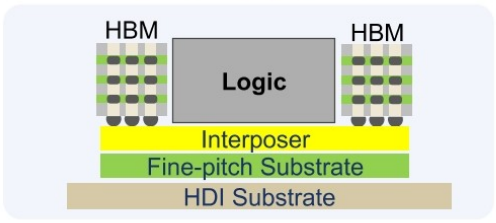
Generative AI market will expand at a rate of CAGR about 50% over the 10 years.



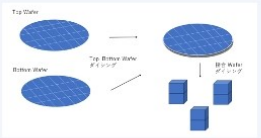
Source：GENERATIVE AI MARKET, Forecast to 2030,MarketsandMarkets

Generative AI chips includes GPU and HBM (high-bandwidth, high-capacity, high-speed special memory)

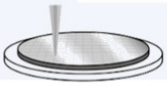


Use of wafer bonding technology to improve device performance

Individuating HBM・DRAM chips



Stealth Dicing



Another thing that is very much in our favor is AI.

The market for generative AI is growing significantly. On average, the market is expanding at a rate of about CAGR 50% over 10 years. One forecast suggests that about 70% of semiconductor manufacturing in 2030 is expected to be related to AI.

The structure of this AI chip is very complex. The Logic, which is the heart of the chip, and it requires a large amount of memory to perform various processes. The HBM, high-bandwidth, high-capacity, high-speed special memory, contains a large number of layers are used very much.

Our stealth dicing is used to produce the special memory. As generative AI chips become more widespread and production volume increases, the demand for this stealth dicing will also increase. The trend for 2024 is that orders are continuing to decline as a reaction to the advanced orders that we have received from our customers. However, no major changes in our company's position. We expect that after FY2025, the excess inventory will be resolved and the market will recover, putting us back on a growth path. We expect AI in particular will be a driving force to recover the semiconductor industry at first. This will be followed by a recovery in CT-related and non-destructive markets. This will be after 2H of 2025. We hope to recover to pre-COVID-19 pandemic levels. The dental sector will remain flat for a while, though it depends on the trend of interest rates in Europe and the US. And for FA-related products, especially for encoders, we expect that it will still take a little time to eliminate excess inventories at customers,

Capital investment/Depreciation/R&D expenses

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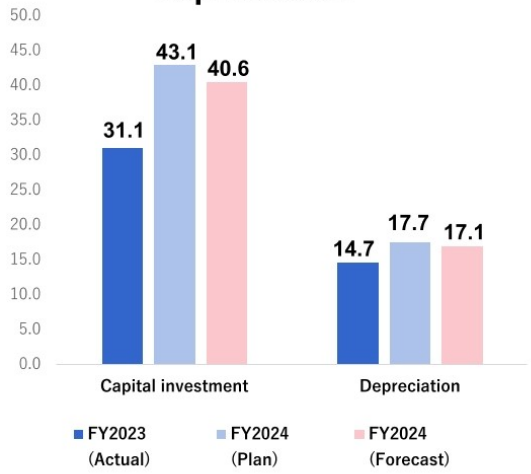
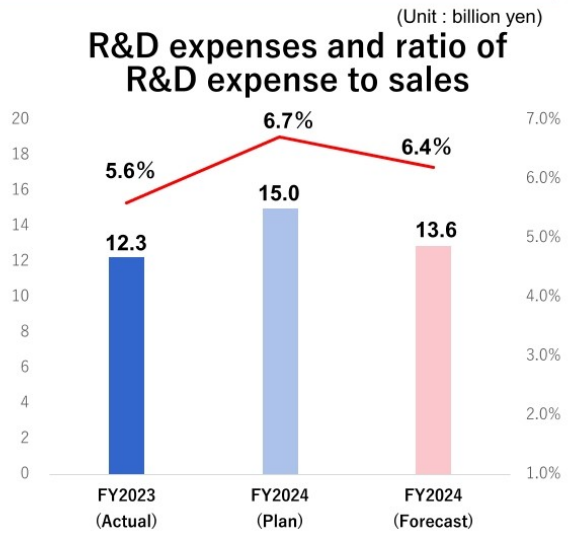
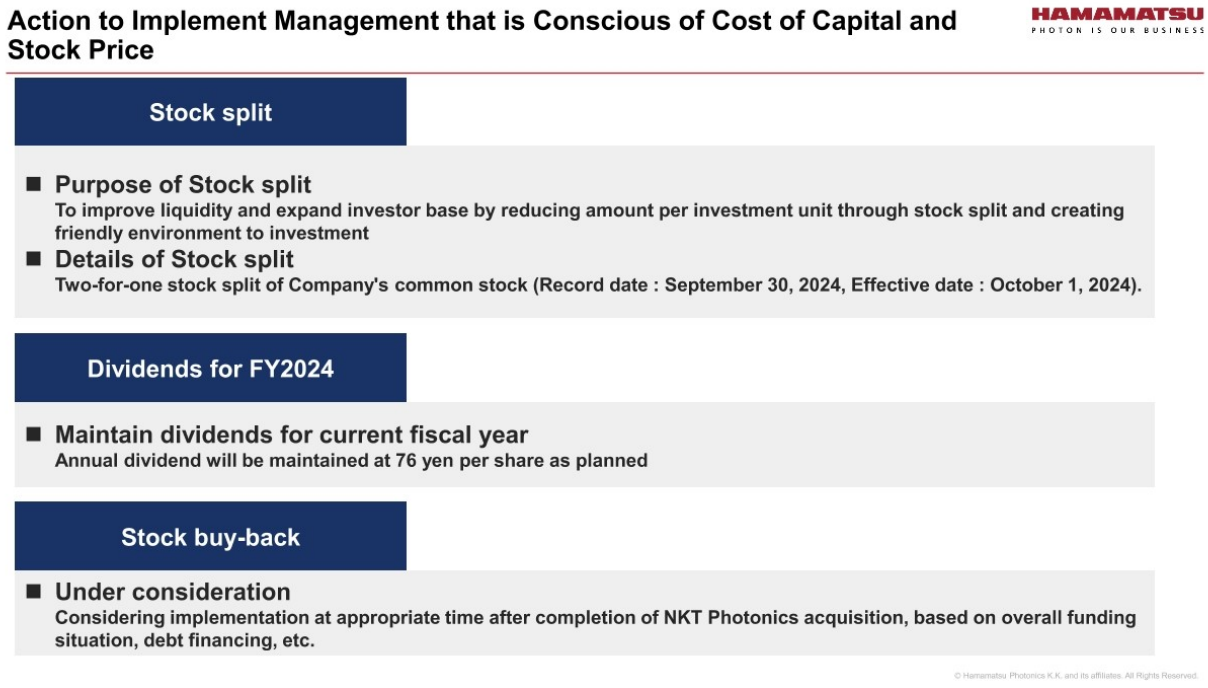




Capital investment and depreciation, and research and development, as you can see.
Capital investment are expected to be slightly lower. Depreciation is expected to be slightly lower, and research and development expenses are also expected to be slightly lower than planned.



We are planning to carry out a stock split as action to conscious of cost of capital and stock price.

We will reduce the amount per investment unit to create friendly environment to investment.

We plan to split each share into two shares in order to increase liquidity and to expand investor base.

As for dividends, we plan to maintain dividends at JPY76 per share as originally planned, despite the decrease in sales and profit.

We plan to complete the acquisition of NKT Photonics by the end of this June.

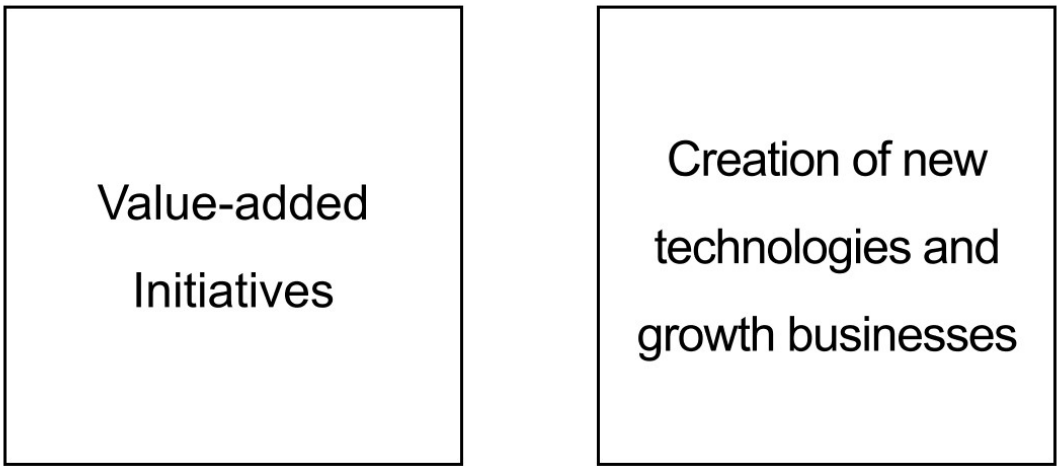
As for the share buyback, we are now considering implementing it at an appropriate time, taking into account the overall funding situation, including the amount of this acquisition, as well as the debt financing.

The most important thing for us is to make a solid effort to improve our corporate value over the medium term. We will disseminate information on its mid-term growth strategy story. We intend to strengthen this information dissemination capability.

In conjunction with the mid-term plan, we are also considering financial strategies. We intend to determine target values for management indicators such as ROE and operating margin, as well as upgrade our capital allocation. We would also like to make effective use of cash and cash equivalents and other growth investments. We would like to move forward with the use of finance, too.

We believe that it is particularly important to maintain sustainable profitability. We are also considering measures to reduce capital costs.

Creating synergies through collaboration



Finally, I would like to talk about TOPICS.
The keyword is the creation of synergy through collaboration. In any case, we would like to firmly address the issue of high value-added products, which is one of our strengths, as well as the creation of new technologies and growth industries.

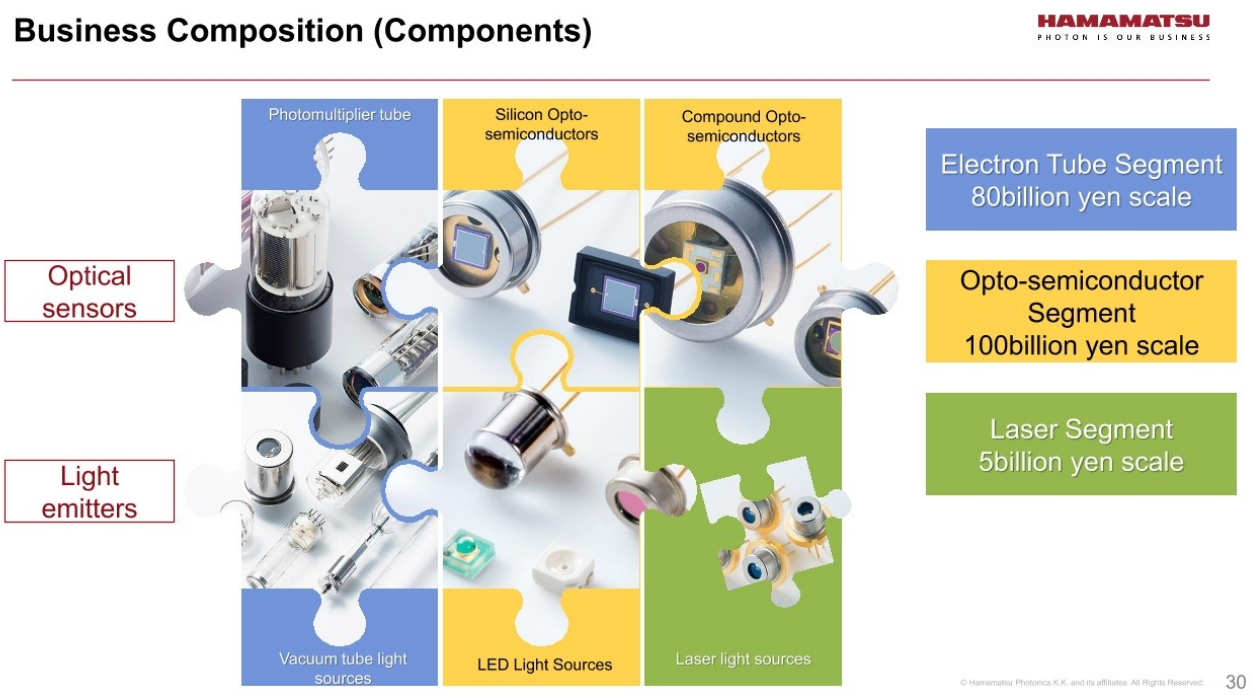
A module is that high value-added, customized, modular product. Each division has many elemental and very unique elemental technologies for making products. We design, manufacture, and sell high value-added custom products that meet customer needs by linking the elemental technologies of each business division. We plan to build new businesses across divisions, which cannot be done by each business segment on its own.

The goal is a product that would be implemented directly into the customer's final product. As shown in the example here, we provide modules, including customized sensors, custom fibers, scintillators, coolers, special readouts, etc., and have them mounted directly in the customer's equipment. We would like to proceed in such a way that we can offer the high value-added custom module.

The other is to strengthen core competencies.

X-rays are a very important technology for us. Until now, each business segment has developed its X-ray business separately, each with its own specialties. However, we are facing competition from Chinese and other companies in the X-ray field. So, we have established a new organization, the X-ray Business Strategy Office, under the direct control of the president. That is a cross-divisional organization with engineers and marketing personnel selected from each segment.

The purpose of this department is to develop and propose new, high value-added products by firmly linking elemental X-ray technologies within the Company. It will collaborate on marketing across the business, propose sales strategies and new products, and to conduct technical verification.



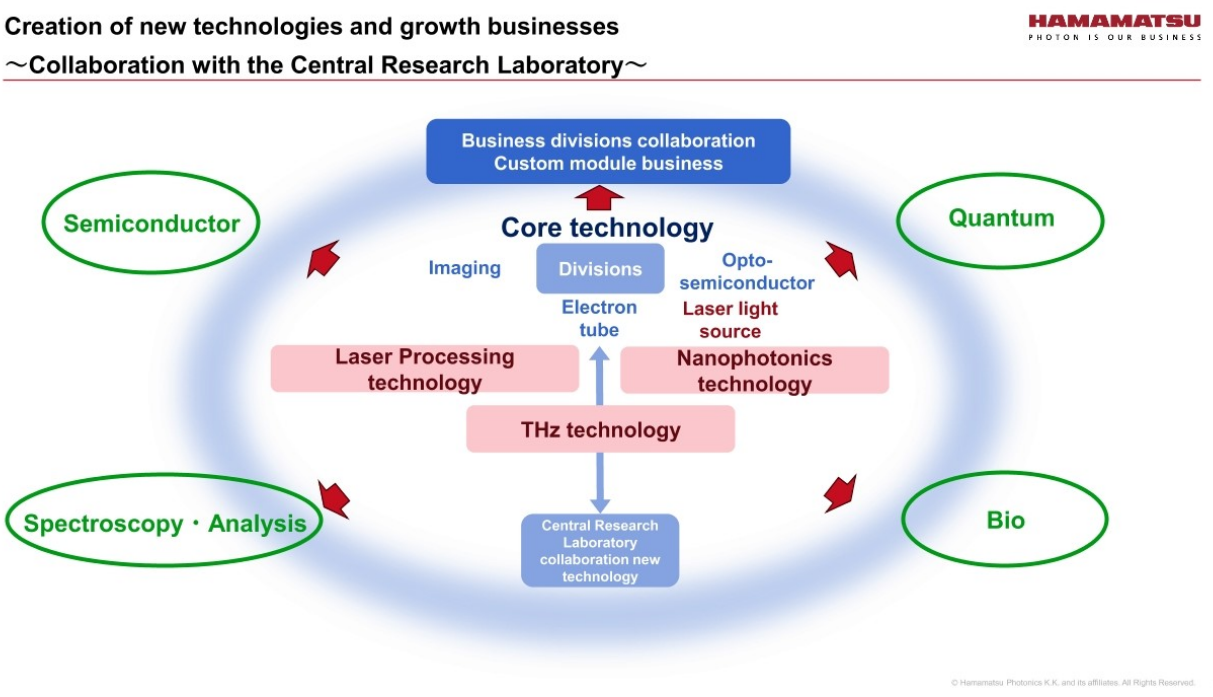
This is followed by the second TOPICS.

It is the creation of new technologies and growth businesses.

This represents the composition of our optical technology and business. We have optical sensors and light-emitters. The horizontal axis is the optical sensors and light-emitters, and the vertical axis is the technology that serves as the element.

Vacuum-based photomultiplier tubes and lamps. And image sensors and avalanche photodiodes or others based on silicon optical semiconductors. And LEDs. The other is a near-infrared detector based on compound semiconductors. These are very well-developed so far, but unfortunately, we do not yet have this laser light source as one of our strengths. This laser business is inferior to the JPY80 billion scale of electron tubes and the JPY100 billion scale of optical semiconductors.

Now that we have received permission to acquire NKT Photonics, the first thing we need to do is to make sure that the acquisition is completed. By doing so, we expect very large synergy effects by combining this laser business with our other optical elements and optical technologies. My personal projection now is that our goal is to reach the JPY40 billion scale in 10 years. In this way, we will firmly build a fourth pillar.



I would also like to talk about one more thing, which is the cooperation with the Central Research Laboratory.

We have a central research laboratory. However, it has been rare for the Central Research Laboratory to develop into a major business, but this time, we conducted a comprehensive review of the technologies possessed by the Central Research Laboratory and the technologies needed by the divisions in the future and matched them with each other.

As a result, we have narrowed our focus to three areas: Nanophotonics, THz technology, and laser processing technology, and have started a project to transform these technologies into business by assigning personnel from the divisions and the Central Research Laboratory.

We have also identified four markets where we expect to concentrate and grow using these technologies. These are quantum, semiconductors, spectroscopy and analysis, and bio.

Creation of growth businesses

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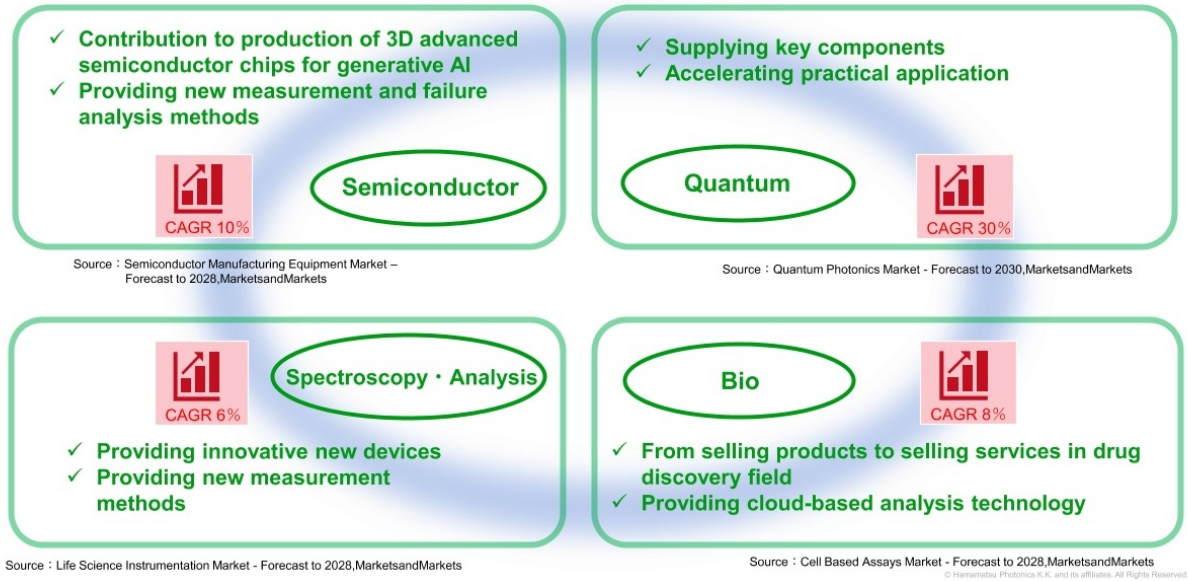
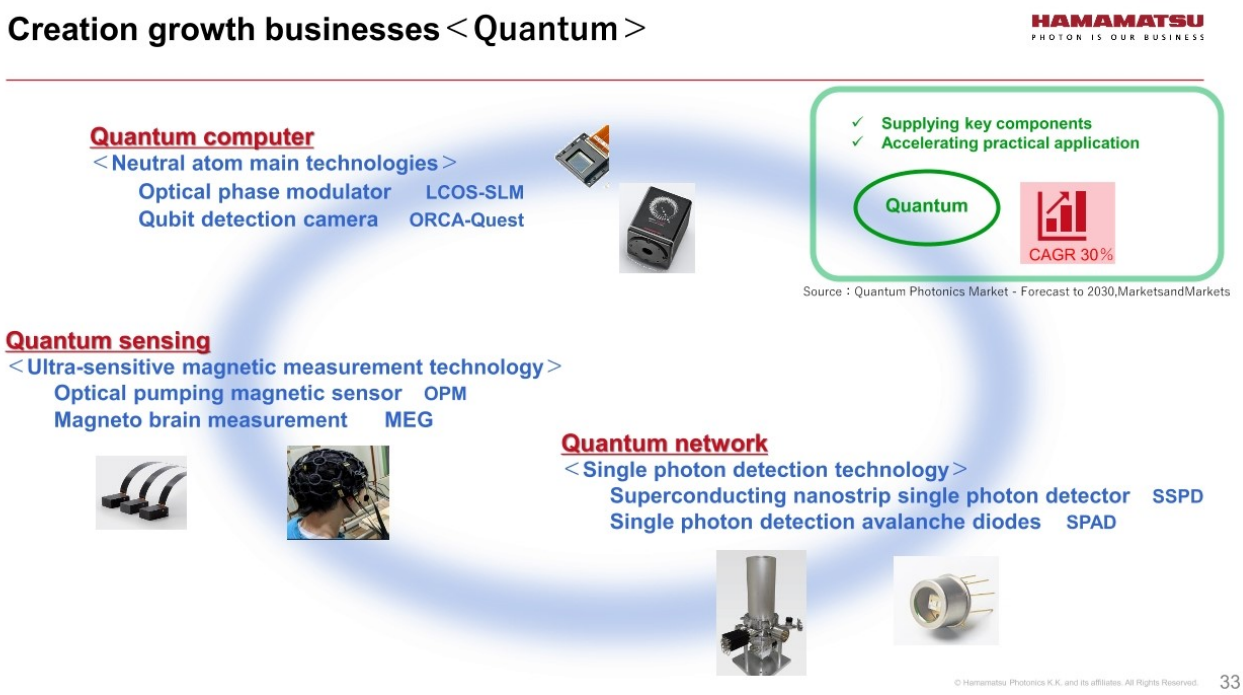


We have summarized the key words for each here.



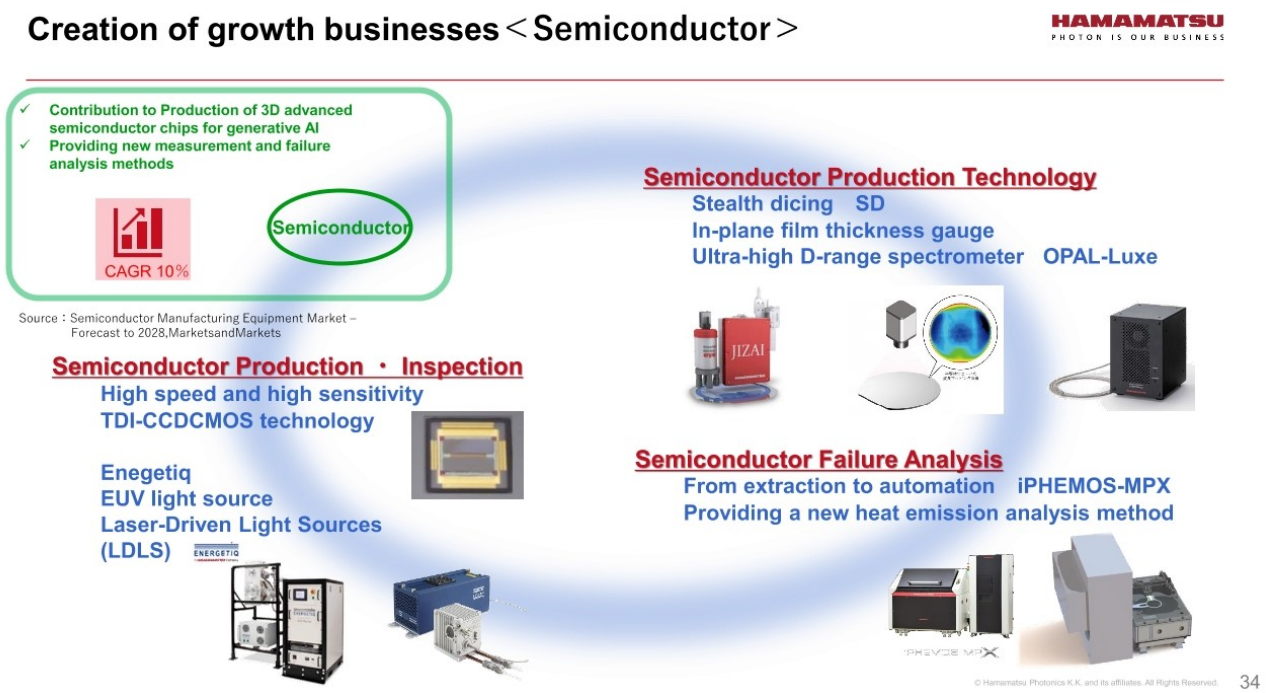
First, the quantum field.

This is our hope to accelerate the practical application of this quantum computers, by firmly supplying key components. The quantum fields have quantum computers, quantum sensing, and quantum cryptographic network communications.

The currently attracting particular attention is a quantum computer using neutral atoms. Three elements are needed for this technology: a spatial light modulator, an image sensor to detect the qubits, and a single wavelength laser source with very low noise. Without these three elements, it is not viable. We will have all those three elements; we will be able to lead the quantum computer market.

For quantum sensing, we have developed an optical pumping magnetic sensor (OPM). We plan to use this to detect very weak magnetism and apply it to medical devices, which are called Magneto brain measurement, or MEG.

Another absolutely necessary technology used in quantum cryptographic communications is single-photon detection technology. In this regard, we have a nanostrip single-photon detector using superconductivity, known as SSPD. The single photon detector SPAD, that will be naturally become necessary to widespread the quantum networks, is also one of our strengths. We would like to focus very much on this quantum field.



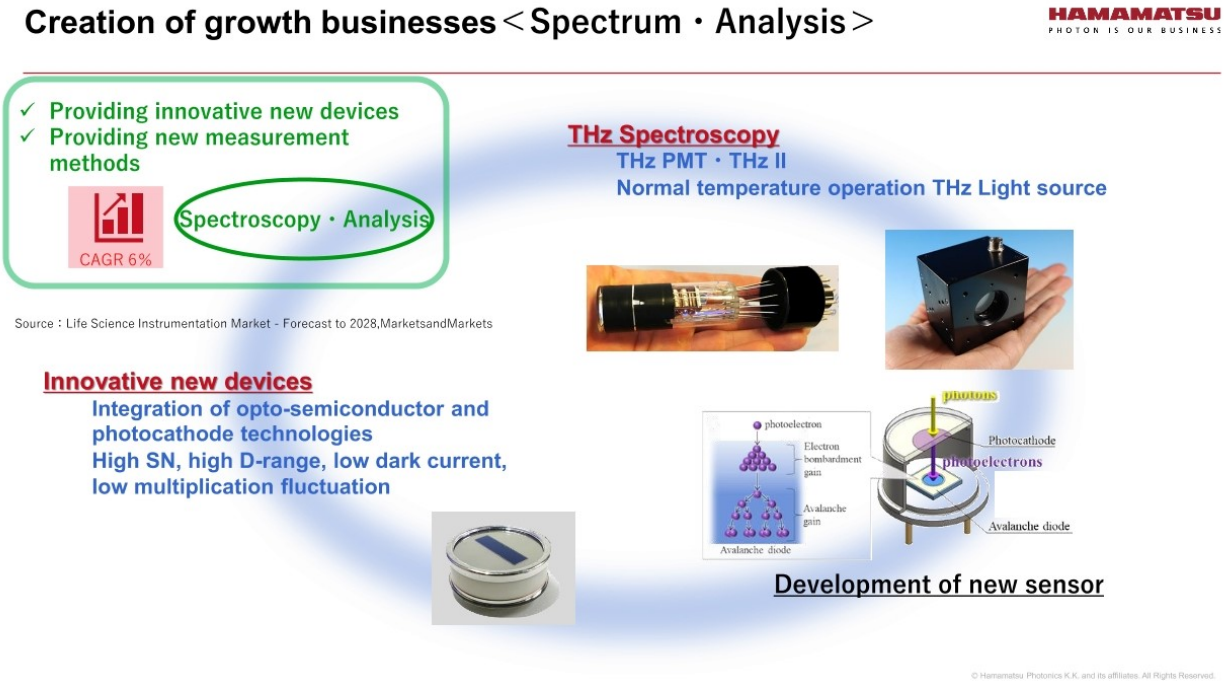
Continuing on, the field of semiconductors.

We believe we can make a significant contribution to the manufacturing of 3D advanced semiconductor chips for generative AI. I would also like to actively promote the provision of new measurement and failure analysis methods.

TDI technology is used in semiconductor manufacturing and inspection equipment, and we have high share of the products. We also offer EUV light sources, a technology that is inevitably required for the manufacture of next-generation semiconductor production and inspection equipment.

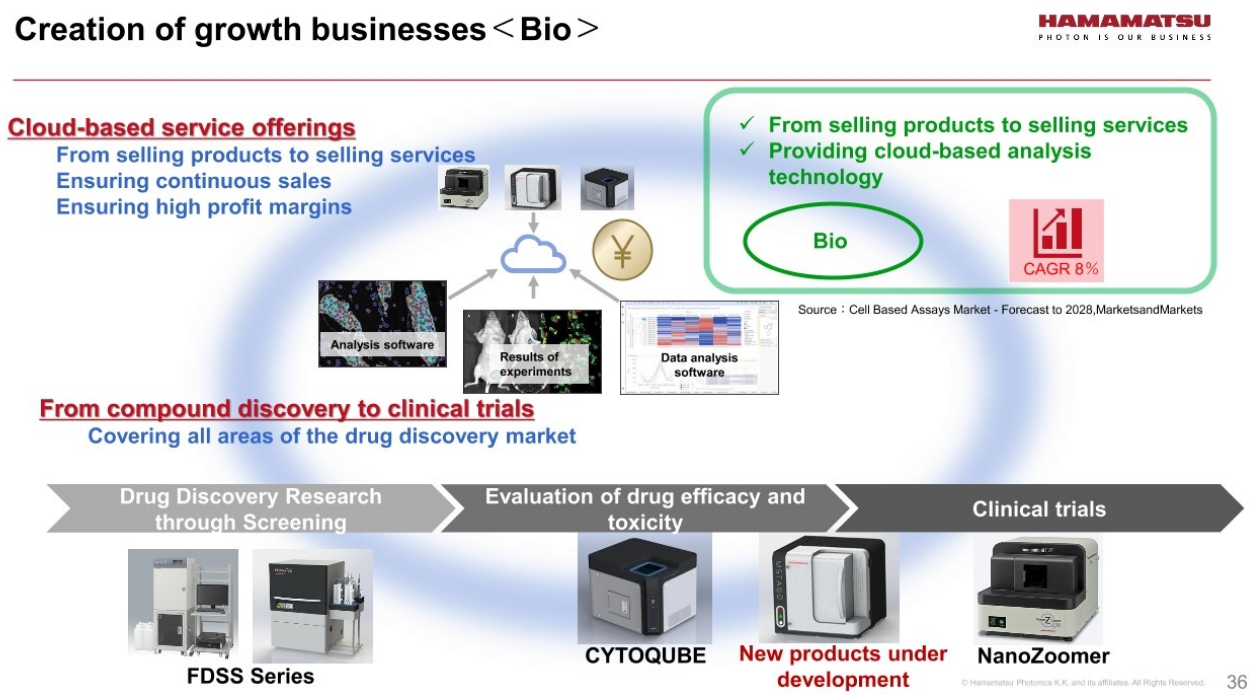
Also, we have a great number of promising products, such as stealth dicing, batch in-plane film thickness measurement, and ultra-high dynamic range spectrometer. I believe this is another strength that can be leveraged in this semiconductor production and inspection field.

As for the semiconductor failure analysis systems, the trend is moving in the direction of total inspections instead of spot checks, we have high expectations that a tremendous number of this failure analysis systems will be used.



The spectroscopy and analysis field.

We provide innovative new devices and new measurement methods. This innovative new device is actually a completely new sensor that combines our opto-semiconductor technology, photocathode, and vacuum technology. The sensor does have almost no gain fluctuation noise, low dark current, very high SN and high dynamic range that photomultiplier tubes and avalanche photodiodes could not cover. We have high expectations for this new sensor and would like to sell this as a fairly high value-added module.



Finally, in the field of bio, we are now moving from the sale of products to the sale of services, and we are also promoting a completely new approach of providing cloud-based analysis technology.

In the drug discovery market, we have a FDSS which is a system for screening of compounds, and NanoZoomer for clinical trials. In addition to the upstream and downstream products, we will introduce a new product called CYTOQUBE for the most important part in between, the evaluation of drug efficacy and toxicity.

Another very innovative new product that measures fluorescence images at multiple wavelengths at high speed, which we plan to announce in early fall. Then we will cover the entire range of this drug discovery area.

And in this whole area, we don't just sell products, we sell services. We use various algorithms to analyze the data, provide the results of the experiments to our clients on a cloud-based system, and charge them for the results. We are aiming for practical application in about three years.

The above is a summary of our growth strategy, which is to firmly build up high value-added products while creating synergies through collaboration. And we would like to proceed with the creation of new technologies and growth industries.