
VISUALIZE THE FUTURE



Fiscal Year Ended March 31, 2020

Results Briefing

Digital Media Professionals Inc.

May 20, 2020

The views and forecasts that appear in these materials represent determinations made by the Company at the time the materials were created. The accuracy of the information therein is not guaranteed. Please be aware of the possibility that actual performance and results may differ considerably due to a variety of factors.

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**Financial Results and Progress of Initiatives,
Fiscal Year Ended March 31, 2020**

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**Business Environment and Forecast,
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Initiatives and Blueprint for Future Growth

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Initiatives and Blueprint for Future Growth

Results Highlights: P/L

(Unit: million yen)	FY 03/2020 (Initial estimate on May 10, 2019)	FY 03/2020 (Revised estimate on Apr. 10, 2020)	FY 03/2020 (Actual)	Difference between initial forecast and actual results	FY 03/2019 (Actual)	YoY change
Net sales	1,300	1,320	1,328	+28	1,086	+241
Operating income	30	80	82	+52	28	+53
Ordinary income	30	80	85	+55	33	+51
Net income	20	60	65	+45	35	+30

Differences compared to initial forecasts

- Net sales slightly exceeded the initial forecast because the shipment of the image processing semiconductor "RS1" proceeded as planned, sales of IP core license business exceeded the initial expectation, and professional service business went firmly mainly for mobility
- Operating income, ordinary income, and net income exceeded the initial forecast due to the increase in the ratio of the highly profitable IP core licensing business to total sales

Changes from the same period of previous year

- Net sales grew due to increased sales of RS1 and new IP licenses for GPU / AI, offsetting declines in NEDO commission income and running royalty income mainly for game consoles
- Operating income grew due to sales-increase effect and expansion of IP licensing business with high profit margin, absorbing an increase in expenses due to an increase in personnel to strengthen the development system. NEDO subsidy income absorbed the cost of the issuance of new shares, and ordinary income and net income also increased

Results Highlights: Net Sales by Business

IP core license business

Sales ¥380 million

YoY change +¥150 million

- GPU/AI-related new IP licenses greatly increased
- Decrease in running royalties centered on game console customers

LSI product business

Sales ¥553 million

YoY change +¥189 million

- Recorded sales of RS1 for volume production and "ZIA™ C3" AI FPGA modules

Professional services business

Sales ¥394 million

YoY change -¥97 million

- ¥172 million of the previous fiscal year's commissioned revenue related to NEDO's project "An Energy Efficient AI Engine and an Integrated Cloud of Heterogeneous AI engines" was stripped away (Became a subsidized project from this fiscal year, and recorded ¥57 million in non-operating income including revenue related to cancer companion diagnosis)
On the other hand, commissioned revenue of 38 million yen was recorded for the operation of the NEDO's "AI Edge Contest" project
- Contract development service revenues from Yamaha Motor, drive recorder-related customers, License plate-related customers, and industrial customers increased

Increased equity through business and capital tie-up with Yamaha Motor (Equity ratio: 92.2%)

(Unit: million yen)		End of March 2019	End of March 2020	Amount change	Major factors
	Current assets	2,063	3,077	+1,014	Cash & deposits +853, Accounts receivable - trade +45 Securities +99
	Non-current assets	320	763	+443	Investment securities +499, Intangible assets -52
Total assets		2,383	3,841	+1,458	
	Current liabilities	366	279	-87	Accounts payable - trade -154 Accounts payable - other +38, Income taxes payable +29
	Non-current liabilities	18	18	-0	
Total liabilities		385	297	-87	
Total net assets		1,998	3,543	+1,545	Capital stock +742, Capital surplus +742, Retained earnings +65
Total liabilities and net assets		2,383	3,841	+1,458	

RS1, Next-Generation Graphics Processor Now Producing in Volume and Shipping



● Promoting multi-platforms strategy

- Gaming machine
 - Adopted by ZEEG, a joint venture between Sammy and Universal Entertainment
 - Shipments to pachinko parlors started late 2019. The number of titles scheduled for release increases
 - Adoptions of ZEEG's industry-standard chassis by other game machine manufacturers are increasing
- Arcade machine
 - Adopted by BANDAI NAMCO Amusement for "SEA STORY Lucky Marine Tours"

Fiscal Year Ended March 31, 2020: Progress of Initiatives

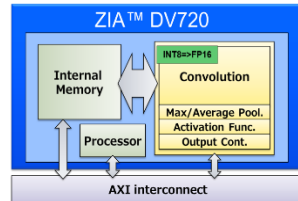
Expanding Portfolio and Sales of AI Products

Expanding product lineup and customer adoptions of ZIA AI processor IP, module, and software

IP Core Products

ZIA™ DV500/DV720

Compact and high performance **AI inference processor IP** that uses deep learning



Application

- AI-integrated camera SoC
- Autonomous driving SoC

Update

- Announcement of DV720 (8bit INT support)

Initiatives

- Improvement of performance
- Enhancement of line-up

Results

- Adopted for safe driving assistance and consumer customers, leading to future running royalties

Module Products

ZIA™ C2/C3

Flexible and low power consumption **AI inference processing module**, mounting DMP DV700 to FPGA



Application

- Industrial machinery
- Robotics
- Medical equipment

Update

- Release of C3 Ver7.2 (Improved performance)

Initiatives

- Development of products with high added value, such as products with built-in cameras

Results

- Although there were shipments for performance confirmation, but not led to shipment for mass production

Software Products and Services

ZIA™ SAFE

ZIA™ Classifier

ZIA™ Plate

- Self-developed and advanced **image recognition engine** based on AI and image-processing technology
- Provision of **professional services** optimized for each domain

Application

- Driver monitoring
- Analysis of near misses
- Medical diagnosis

Update

- Sale of ZIA Plate
- Acceleration of service aimed at safe driving support (ZIA SAFE)

Initiatives

- Optimization aimed at growth domains

Results

- Adopted by drive recorder-related / license plate-related customers

- **Business and capital tie-up with Yamaha Motor**

Promoting AI implementation optimized for each product domain of Yamaha Motor in developing such as automatic / autonomous driving systems in low speed areas, labor-saving and automation systems in agricultural areas using robotics technology, and advanced safe driving assistance systems for high-speed vehicles

- **Strengthening domain-specific solutions and promoting customer projects**

- Currently conducting several projects on safe driving assistance (vehicle exterior and interior monitoring)
- Currently conducting several projects on license plate recognition

- **Technology development and social contribution through promoting NEDO projects**

- Development of AI Platform for Artificial Intelligence (AI): An Energy Efficient AI Engine (Subsidy project from last year)
- Research and development of AI hardware for AI pathology imaging system for cancer companion diagnostics (Emergence into medical AI area)
- Operation of AI edge contests (Discovering excellent technology, advanced ideas and human resources)

Establishing Subsidiary for Development in Vietnam

- Utilizing high quality human resources in Vietnam to strengthen and complement the development system
- In the mid term, aiming to develop the local market in Vietnam and making it a bridgehead for the overseas business

Company name	Digital Media Professionals Vietnam Company Limited
Location	Phuong Long Tower, no. 506, Nguyen Dinh Chieu Street, Ward 4, District 3, Ho Chi Minh City, Vietnam
Capital	Equivalent to US\$ 100,000 (fully-owned by DMP Japan)
Chairperson	Schmitt Benjamin
Representative (President)	Nguyen Tang Quang
Employees	10+ Engineers, 1 Admin.
Business	AI-related engineering service
Started on	April 1, 2020

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Initiatives and Blueprint for Future Growth

● Japan / World Economy

- The future of Japan and the world economy is expected to remain severe due to the global pandemic of new coronavirus infections

● Semiconductor / AI Industry

- Negative impacts of the economic downturn such as declines in utilization and willingness to invest are inevitable in the short term
- Demands for semiconductors for AI / IoT fields are expected to grow in the medium term
- Acceleration of innovation and increased AI roles are expected for solving social problems including the current difficulties and realizing a safe and secure society

● Amusement Machine Industry

- Occupancy rate of the halls is expected to decrease due to the declaration of a state of emergency
- With a postponement of the Tokyo 2020 Olympics, there will be no gap in the installation of gaming machines at halls
- Complete removal of old standard machines in January 2021 is expected to be extended by 1 year

Business forecast for the fiscal year ending March 2021 is undecided because it is difficult to reasonably calculate the impact of the new coronavirus infection at this stage. It will be disclosed as soon as reasonably predictable.

(Unit: million yen)	FY 03/2020 (Actual)	FY 03/2021 (Forecast)
Net sales	1,328	TBD
Operating income	82	TBD
Ordinary income	85	TBD
Net income	65	TBD

- Although the shipment of "RS1" is expected to accelerate toward the complete removal of the old standard gaming machines, the impact of the decrease in the occupancy rate of the halls due to the declaration of a state of emergency should be scrutinized
- Although domain-specific customers projects are expected to accelerate, trends of customers' investments in development should be assessed
- In order to maintain and improve technological competitiveness in the AI field and strengthen the development system for the sustainable growth, DMP will continue to recruit and train excellent engineers

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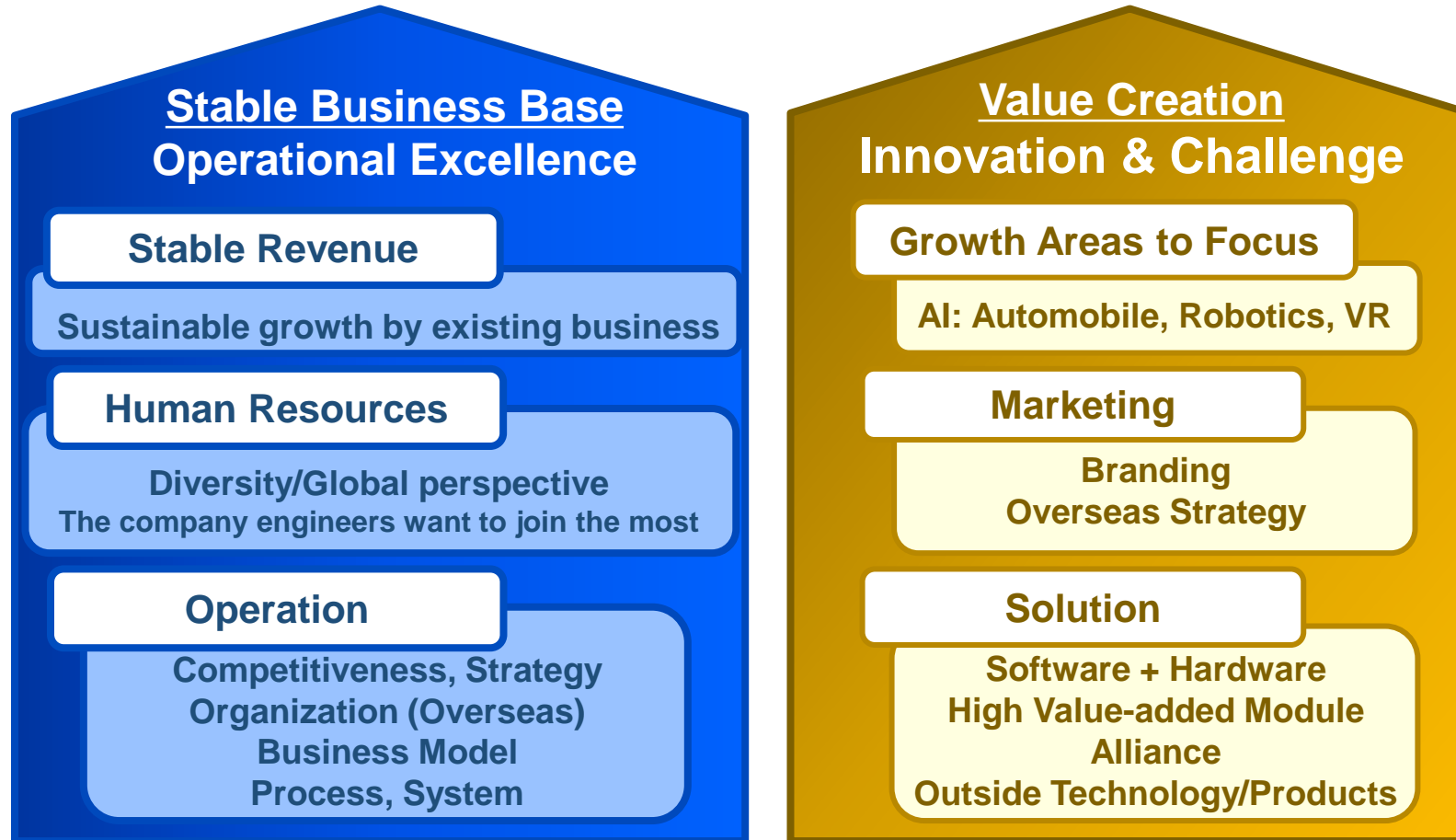
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Business domain: SoC/Module + IP License + Service

Technology base: GPU/AI + Acceleration + Low power

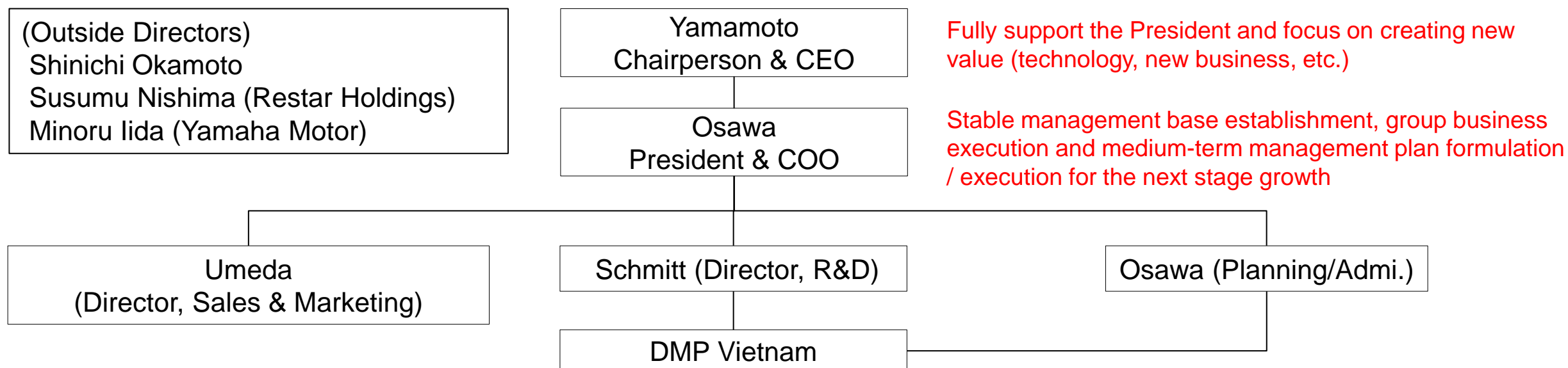
Comprehensive strength by Algorithm + S/W + H/W (SoC) development

New Management Team

(to be approved at the General Shareholders Meeting on June 19)

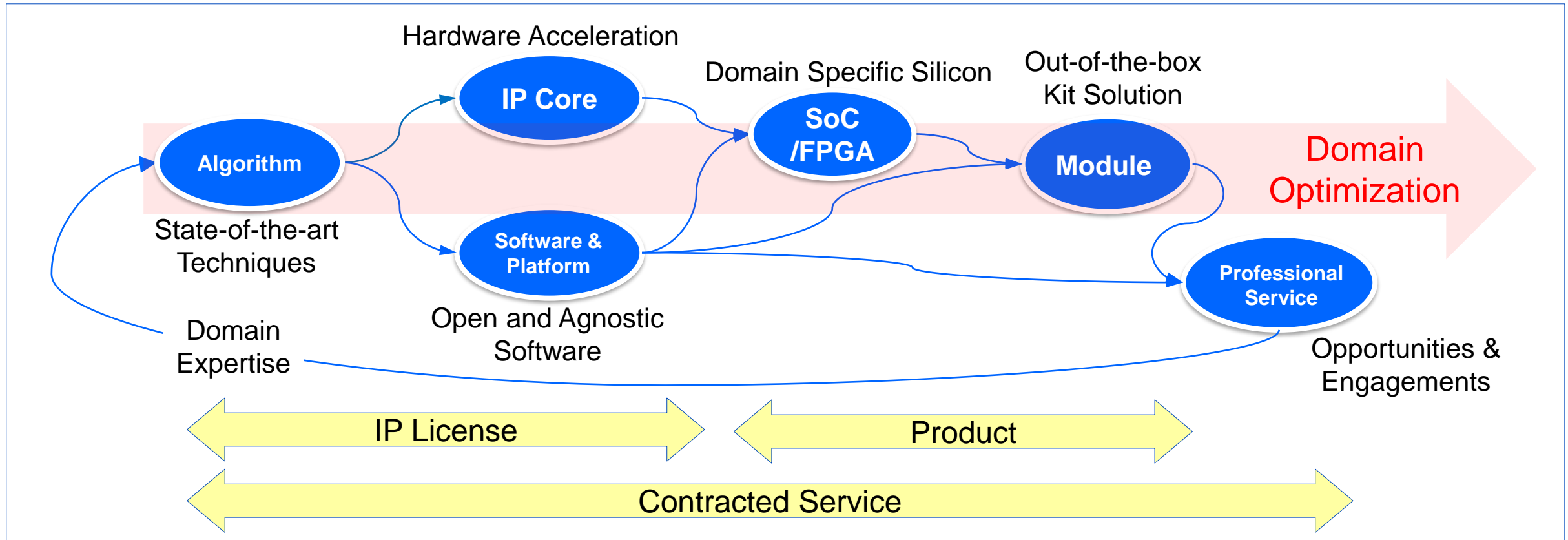
● Aiming at further enhancement of corporate value by the new management

- Further stabilizing management and establishing sustainable growth by two representatives system
- Strengthening AI/solution development system including the overseas R&D subsidiary
- Promoting a diversity at the Board of Directors



Unrivalled integrated development model that allows domain optimization

- Integrated development of algorithm, software, and hardware
- Flexible value proposition and monetization model by offering licenses, products, and professional services



● Approaches to Robotic Vehicle Domain

- Promoting labor-saving and automation (automated driving / autonomous driving) technology development centered on collaboration with Yamaha Motor and other low-speed vehicle areas
- Developing products one step ahead of competitors with an integrated development system of algorithms, software and hardware
- Establishing unique 3D recognition technology "DMP 3D Perception" leveraging DMP's GPU / AI technologies

● Approaches to Safety / DMS* Domain

- Developing software for various safe driving assistance systems to prevent traffic accidents using state-of-the-art algorithms
- Providing a one-stop solution of edge-side real-time processing and cloud processing

● Strengthening of Amusement Field

- Promoting responses to the industry-standard chassis as the industry's only 2D/3D chip
- Strengthening customers support responding to increasing number of titles

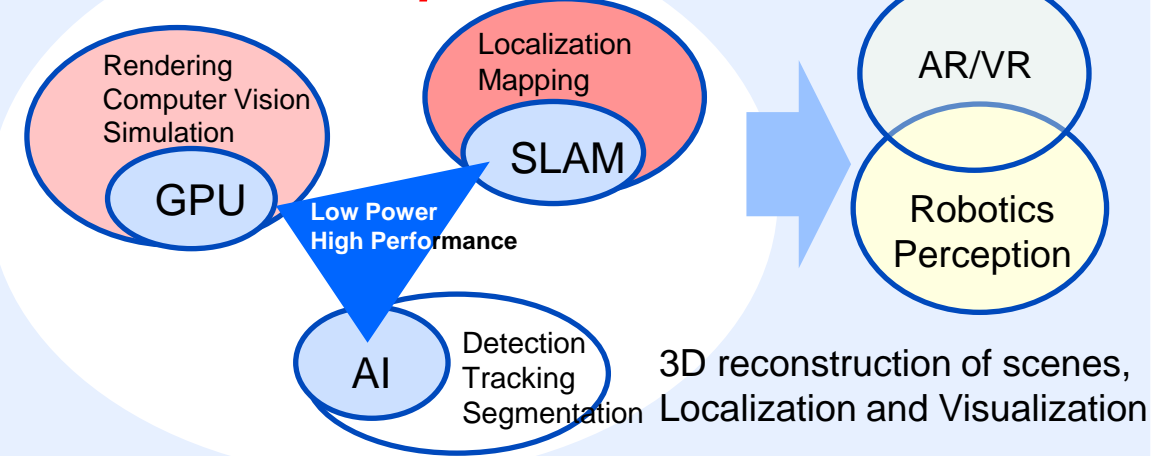
* Driver Monitoring System

Creating new value leveraging DMP's unique technologies

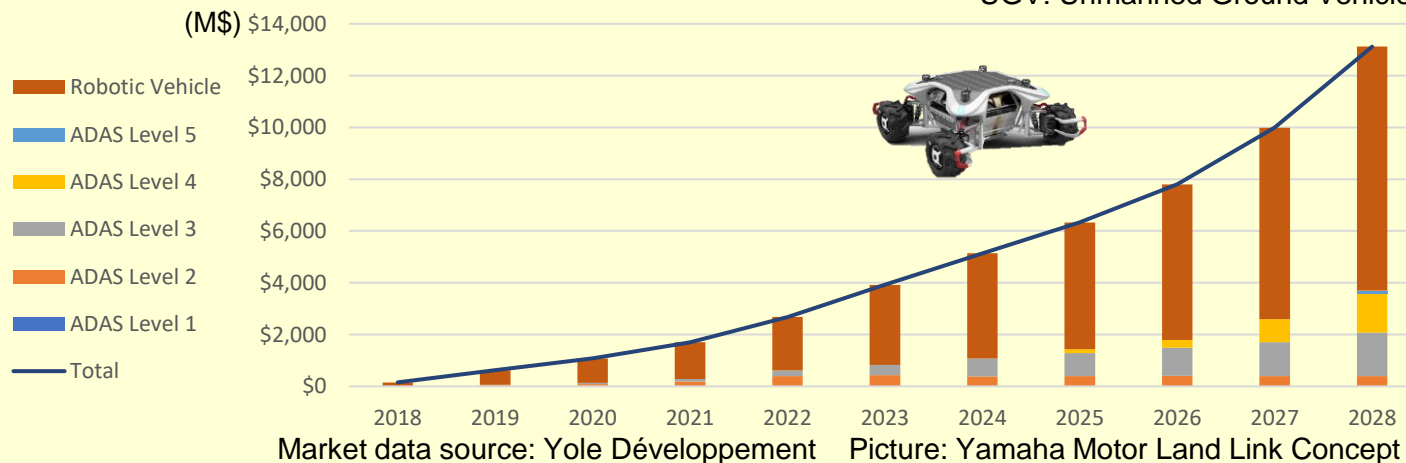
Develop “DMP 3D Perception”, an advanced 3D recognition technology for the eyes of the next-generation robotic vehicles, by combining DMP's GPU, AI, and SLAM technologies

SLAM: Simultaneous Localization and Mapping

“DMP 3D Perception”



AI chip market size for Robotic Vehicle*



* UGV, PPM, AFV, Robo-Taxi, Consumer Robot, other

UGV: Unmanned Ground Vehicle, PPM: Public Personal Mobility, AFV: Autonomous Factory Vehicle

- Market where AI is most effective in automatic / autonomous driving field
- Market size far exceeding the automobile (ADAS) market
\$ 0.6B / 2019, 9.4B / 2028, CAGR 37%
- Solving important social issues
Agriculture / Transportation / Aging / Labor saving / Global warming

Platform for safe and secure system development using drive recorders with diversified functions

ZIA™ SAFE

Professional service for safe driving assistance system

Image analysis using AI and deep learning

Recognition of people,
vehicles and objects

Recognition of road and
surrounding conditions

Face and
eyeline
detection

Pose
estimation

Direction
estimation

Distance
estimation

Privacy
protection

Detection

Tracking

Analysis

Prediction

Building blocks of "ZIA™ SAFE"

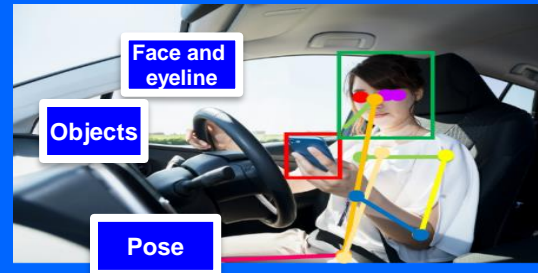
ZIA™ SAFE: Systematize software for drive recorders to help customers develop an advanced safe driving assistance system in a short period of time

DMP features: Flexible support by
combining real-time edge processing
and cloud processing

- Automobile OEMs
- Automobile equipment manufacturers
- Drive recorder manufacturers
- Transportation service companies

Driver Monitoring

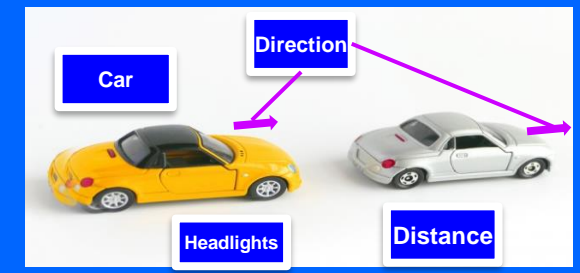
Detection and analysis of dangerous acts such as looking aside, dozing, using smartphone



Prevention of human error and self-defense from dangerous driving such as tailgating

Near-miss (Hiyari-hatto) Analysis

Analysis of surrounding conditions such as rear-end collision, lane departure, tailgating



Accident avoidance and driver education by analyzing images on the verge of an accident

- Drive recorder and DMS standard installation rate will improve due to mandatory AEB collision damage reduction brake installation (40 countries from 2020)
- 45.9% of car owners have a drive recorder (Survey by Ministry of Land, Infrastructure, Transport and Tourism survey, 2019)
- More than half of people like to join if there is a car insurance with a drive recorder special contract (Survey by Ministry of Land, Infrastructure, Transport and Tourism, 2019)
- The global DMS hardware market is forecasted to grow from 762.5 billion yen in 2019 to 1,562.4 billion yen in 2030 (Fuji Chimera Research Institute)

Improvement of technological capability through NEDO projects, application to own business and realization of social contributions

Development of "AI Platform for Artificial Intelligence (AI): An Energy Efficient AI Engine and an Integrated Cloud of Heterogeneous AI engines" (commissioned and subsidized project)

● Purpose

Development of a power saving AI engine which enables AI algorithms to process 10 times more efficient than predecessors

● Details

- Develop a power-saving AI inference engine with hardware implementation of artificial intelligence algorithms and a design-implementation platform with the goal of power-saving and space-saving inference processing and real-time response
- Develop an architecture using a simulator and confirm that the efficiency is more than 10 times higher of the power performance ratio
- Confirm processing efficiency 10 times higher than conventional method with prototype and evaluation on FPGA

- **Period: June 2016 - March 2019 (Commissioned)**
April 2019 - March 2021 (Subsidized)

Adopted in "Project for Accelerating Innovative AI Chip Development" (subsidized project)

● Purpose

As the number of cancer diagnoses increases and advanced diagnosis is required, conduct research and development of AI pathology systems for cancer companion diagnosis with the aim of reducing the burden on pathologists and improving the precision of diagnoses

● Details

- Realize a companion diagnosis AI system presenting potential treatment directions based on past data by combining pathologic image recognition and clinical/surgery reports and applying AI technology in pathologic diagnosis such as that used to identify cancer tissue
- By learning analysis results based on automatic characteristic analysis algorithms for pathology images and clinical information databases, perform research and development of AI hardware that realizes real-time image recognition and diagnosis processing on devices when pathologists perform slide operations using a microscope

- **Period: July 2019 - March 2021**

Improvement of technological capability through NEDO projects, application to own business and realization of social contributions

"Survey of issues for finding ideas regarding Technology Development for AI Chip and Next-generation Computing for High-efficiency and High-speed Processing" (commissioned project)

● Purpose

- Hold a contest on the precision of self-driving image recognition technology for the world's engineers, researchers and students, etc. to discover excellent technology, advanced ideas and personnel

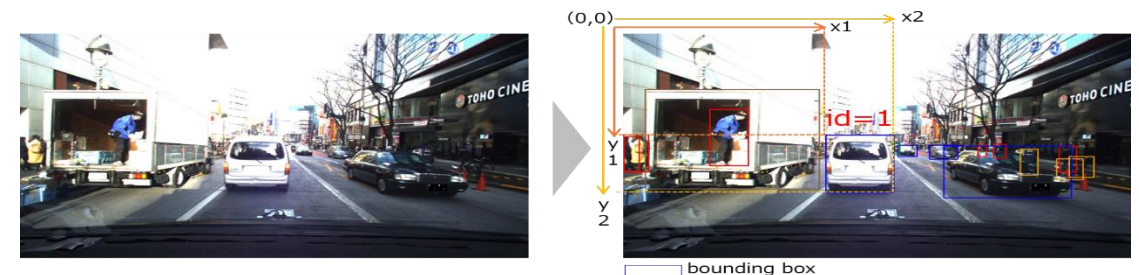
● Details

DMP and SIGNATE jointly run the AI edge contest

● Role of DMP

- Leveraging its strength of having a development system spanning AI algorithms, software and hardware to hold and run the contest on the implementation of AI mainly in edge devices (implementation of AI algorithms in FPGA, etc.)
- Creation of data sets
- Investigation and analysis of collected ideas, organization of effect and issues of discovery of ideas

● Period: August 2019 - February 2021



1st Contest: Accuracy of object detection and segmentation algorithm (end)

2nd Contest: Implementation of object detection on FPGA (end)

3rd Contest: Object tracking recognition accuracy (from April 27 to June 30, 2020)
(DMP participated from the 2nd Contest)

Promoting development of more efficient IoT, robotic and autonomous navigation systems by combining Prophesee's event-based vision sensor leveraging bio-inspired technology, and DMP's edge AI technology

Features of Prophesee's event-based vision sensor

Enabling quick recognition and tracking of objects in a variety of environments by detecting changes in the luminance of each pixel asynchronously and output data

- High dynamic range (120dB or more)
- High data efficiency (10-1000 times less than conventional camera)
- Ultra-low power consumption (less than 10mW)

Examples of what can be done by combining with DMP's edge AI

- Detecting signs and obstacles in low light conditions
- Tracking a slight movement of the driver's line of sight at high speed to prevent accidents
- Detecting thin wires that were previously difficult to detect

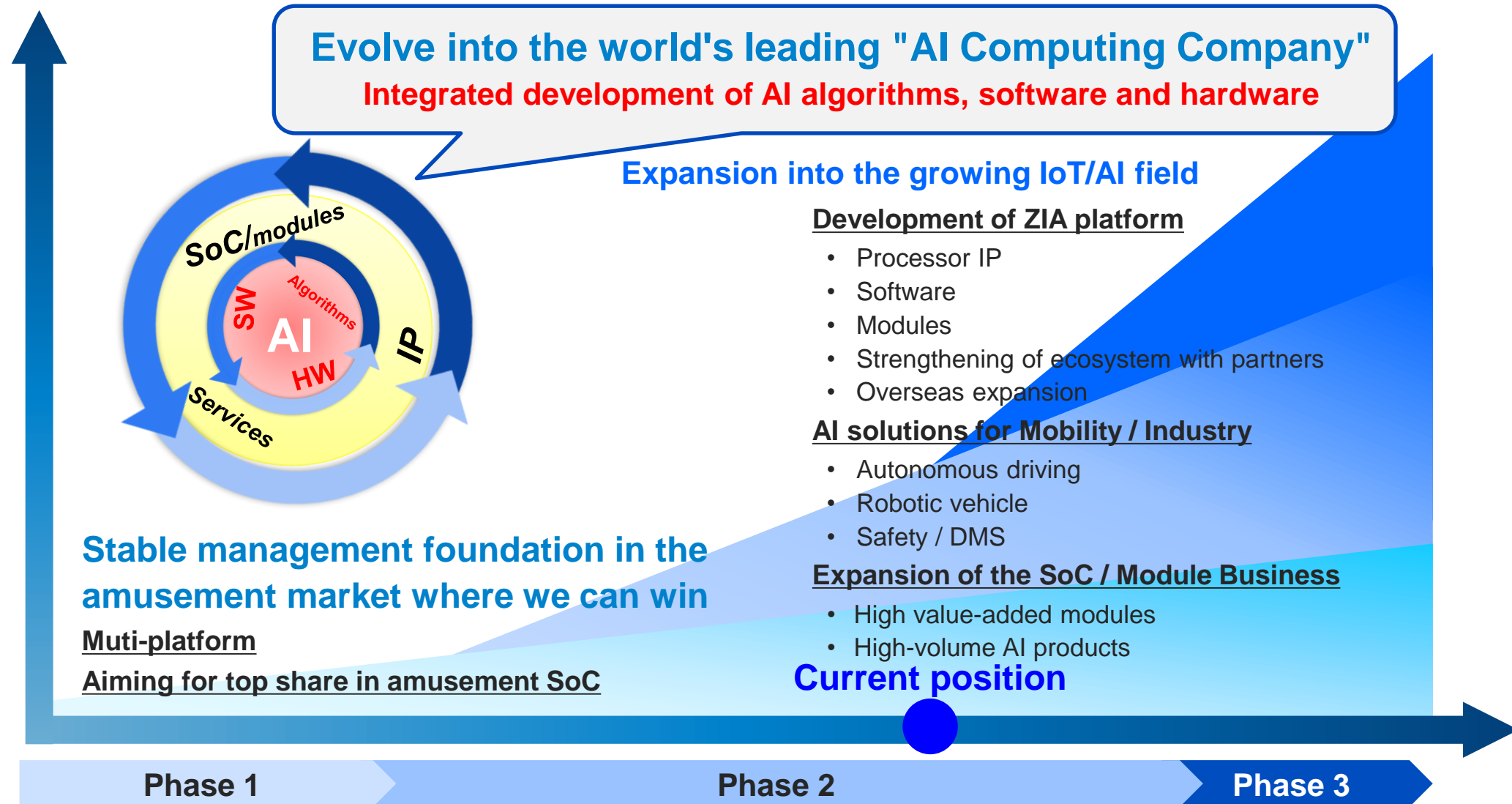
Continuous detection of moving object



Enabling object detection in the dark



(From Prophesee Website)



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Forward-looking statements contained within this document are based on currently available information and involve risks and uncertainties, including macroeconomic conditions and trends in the industries in which we are engaged. As such, actual results may differ materially from those anticipated.

Appendix

Business Description

Business	Description	Major Customers
IP Core* ¹ License Business	<p>Development and license offer of hardware IP (logic design data etc.) and software IP (mainly hardware control drivers and supporting tools for contents creation) necessary for drawing detailed images and artificial intelligence*² (AI) such as deep learning*³</p> <p>a) License fee Compensation through offering IP core license in the process of developing products such as home appliances by customers</p> <p>b) Running royalty Compensation received according to the number of products incorporating IP core shipped by customers</p> <p>c) Maintenance and service fee: Revenue from maintenance of IP based on maintenance contract, etc.</p>	Semiconductor manufacturer/ Manufacturer of final product with embedded semiconductor
LSI Product Business	Development, manufacturing (outsourced) and sales of graphics LSI* ⁴ (SoC* ⁵) mainly for amusement equipment	Semiconductor trading company/Manufacturer of final product with embedded semiconductor
	Development, manufacturing (outsourced) and sales of AI LSI (FPGA* ⁶) for AI equipment	
Professional Service Business	Provision of design service of studying and optimizing the entire SoC system by integrating various IP cores of the Company, software service of developing and optimizing algorithm based on GPU* ⁷ /vision /AI technology cultivated through development of in-house products, etc.	Manufacturer of final product with embedded semiconductor

*1: Partial circuit modules within an LSI, designed for a specific function (e.g. graphics IP core). IP stands for Intellectual Property.

*2: Software and system that enable computers to make human-like perceptions and judgments such as computer programs that understand and judge sentences, images, conversations, sounds, etc.

*3: A type of machine learning method that realizes artificial intelligence by utilizing human brain imitated neural network mechanism, which is being commercialized in the field of image recognition

*4: Large-scale integrated circuits composed of silicon wafers (materials with properties intermediate between conductors and insulators used in the manufacture of semiconductor products). LSI stands for Large Scale Integration and is also called "semiconductor".

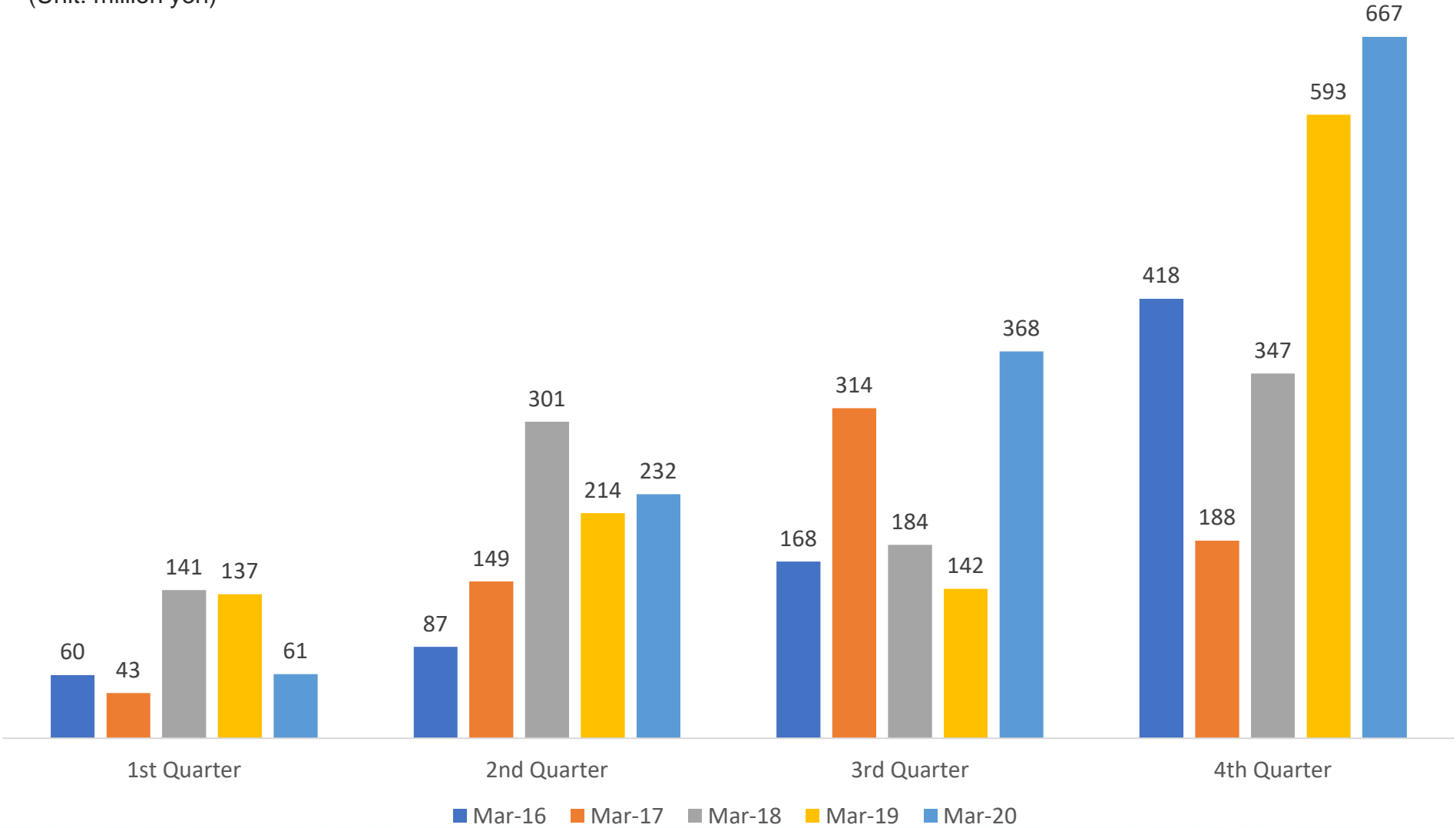
*5: Integrated circuit (design method) that integrates a series of functions (systems) required on one semiconductor chip. SoC stands for System on a Chip.

*6: Integrated circuit that allows buyers or designers to set and change the configuration after manufacturing. FPGA stands for Field Programmable Gate Array.

*7: Arithmetic unit or processor specialized in real-time image processing represented by computer games. GPU stands for Graphics Processing Unit. By utilizing its better performance in parallel computing performance than CPU, technologies called GPGPU (General-Purpose computing on GPU) that apply its computing resources to purposes other than image processing are applied to the AI/deep learning field.

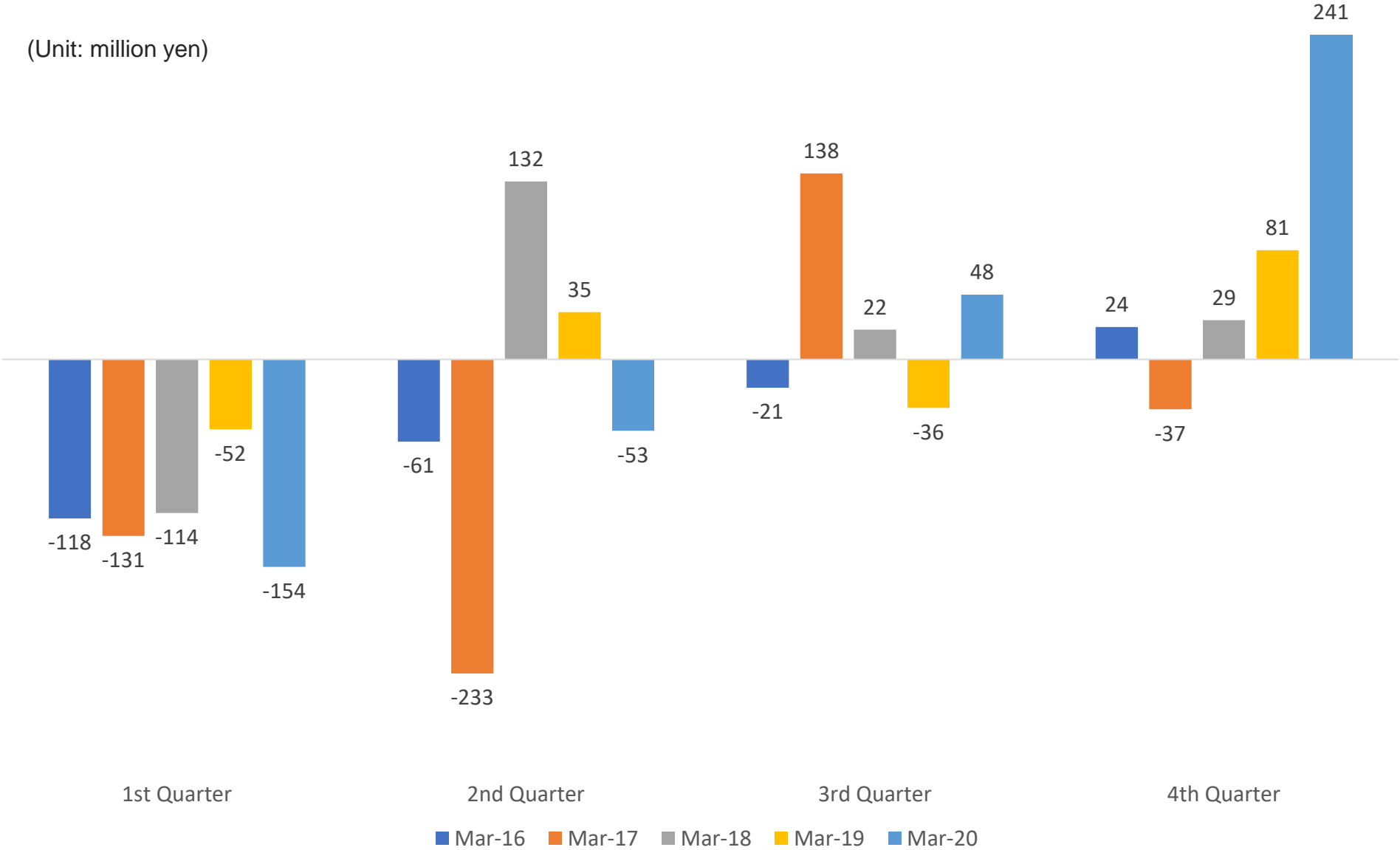
Quarterly Net Sales Trend

(Unit: million yen)



Quarterly Operating Income Trend

(Unit: million yen)



Major Activities (Fiscal Year Ended March 31, 2020)

Each item is linked to PR/IR news (in Japanese or English) of DMP's website.

Date of Announcement/Event	Details
April 3 - April 5, 2019	Partners exhibited ZIA™ C3 KITs at AI (Artificial Intelligence) EXPO
April 10, 2019	Release of ZIA™ C3 KIT Ver. 7.1
May 10, 2019	Business and capital alliance with Yamaha Motor Co., Ltd.
May 16, 2019	Image processing processor "RS1" adopted by ZEEG, a joint venture between Sammy and Universal Entertainment as units and parts for pachinko/pachislot machines
May 17, 2019	Acquired certification of International standard "ISO9001"
May 20 - May 23, 2019	Exhibit at "Embedded Vision Summit 2019" (Santa Clara, California, USA)
May 21, 2019	Release of ZIA™ DV720 IP Core
June 7, 2019	President Yamamoto invited to the Pitch to the Minister hosted by Mr. Takuya Hirai, Minister in charge of Information Technology Policy
June 12 - June 14, 2019	Exhibit at "Image Sensing Show 2019"
June 24, 2019	Release of ZIA™ C3 KIT Ver. 7.2
July 24, 2019	Mr. Takuya Hirai, Minister in charge of Information Technology Policy, visited DMP
July 30, 2019	Release of license plate recognition software "ZIA™ Plate"
August 7, 2019	"Research and development of AI hardware for AI pathology imaging system for cancer companion diagnostics" adopted as NEDO's "Project for Accelerating Innovative AI Chip Development"
October 1, 2019	Technical partnership with Computermind Corp. in an integrated environment spanning from creation of AI aimed at product visual inspections to implementation of edge AI
October 8, 2019	Image recognition engine ZIA™ Classifier is adopted for Hiyari-Hatto (near-miss) image analysis for DENSO TEN Drive Recorder
October 25, 2019	Adopted for NEDO project of "Survey of issues for finding ideas regarding Technology Development for AI Chip and Next-generation Computing for High-efficiency and High-speed Processing"
November 8, 2019	Going into full scale in professional services for safe driving support system development. Systemizing the necessary functions into "ZIA™ SAFE" for realizing the driver monitoring, Hiyari-Hatto (near-miss) detection, and tailgating detection systems using drive recorders
December 10, 2019	Joined the international industry organization "The Autware Foundation" that aims at the industry standard for autonomous driving OS
February 25, 2020	DMP's image processor "RS1", adopted for new medal game machine "SEA STORY Lucky Marine Tours"
March 12, 2020	DMP BLOG is up and running!