

## Value Creation Process

As the IT professional group who create a better future, the TechMatrix Group solves social issues and contributes to the creation of a better future by continuing to embrace new technologies and embark on new businesses.

### Corporate Philosophy

P.01

# The IT professional group

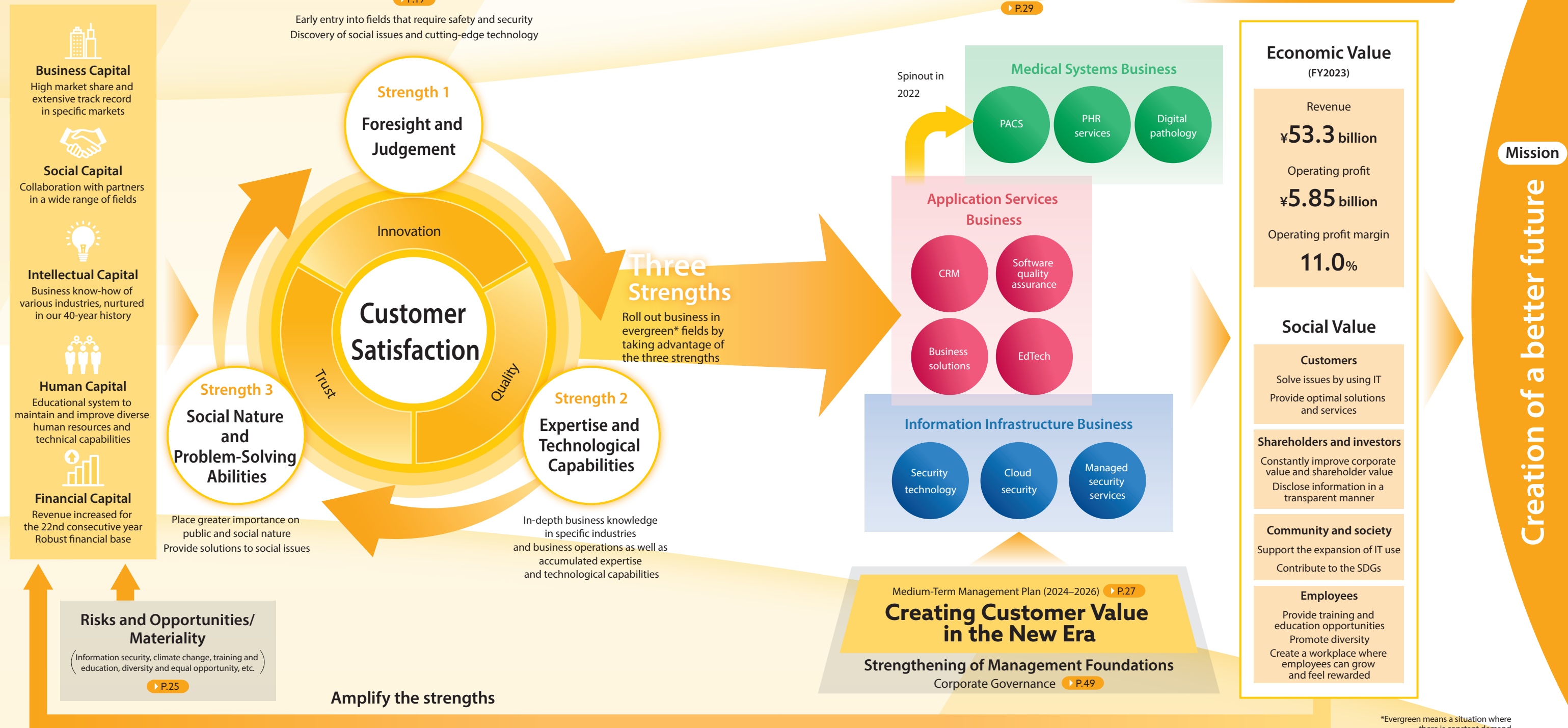
# who create a better future

## Management Capital

## Driving Power of Value Creation

## Value Creation and Business Activities

## Value Created



\*Evergreen means a situation where there is constant demand

Strengths and Case Studies of TechMatrix

Strength.01  
Foresight and Judgement

We read and understand changes in societal needs and directions of technology advancement, identify growing markets, and enter those markets early. In the technology field, we find partner companies with high growth potential at an early stage and form robust alliances based on trust. We thus keep tapping new technologies and business fields.



Strength.02  
Expertise and Technological Capabilities

Moving away from a labor-intensive business model unique to Japan's information service industry, we polish Business know-how in specific fields, as well as specific technologies. With our expertise and technological capabilities, we aim to be the top player in specific markets.



CASE STUDY Beginning of the Palo Alto Business  
Expanding the security business with a deep partnership

In October 2009, TechMatrix concluded a distributor agreement with a next-generation firewall\* vendor, Palo Alto Networks, Inc. ("Palo Alto"), and began a business as a distributor (primary distributor). As there had been no significant technological advances since the late 1980s in terms of allowing and blocking network traffic, conventional firewalls presented a large security loophole. Palo Alto's next-generation firewall realized "next-generation" security measures that enable control for each user and each application, which is completely different from anything that has gone before.

The founder and CTO of Palo Alto has experience in developing key technologies for conventional firewalls, as well as being the founder and CTO of a company that released a hardware product that protects against hacking, something that firewalls could not do, ahead of its competitors. I first came across Palo Alto at an Interop exhibition in the United States, and I was also introduced to the company by a Japanese venture capital firm. I was deeply impressed by the facts that Palo Alto had a completely new concept and that its technology had been created specifically for that purpose (instead of patching something onto existing technology).

Palo Alto already had two distributors in Japan, and its Japanese subsidiary was cautious about selecting a third distributor. Amid that caution, when the management team from Palo Alto's head office visited Japan, we kept negotiating with them, explaining our view of the market and our business plan over and over. That persistence paid off, and we were able to become their distributor.

We faced many difficulties during the launch phase in particular. While the term "next-generation firewall" is widely

known today, back then, it was relatively unknown, as was Palo Alto Networks, which has since become the world's largest manufacturer specializing in cybersecurity. For this reason, together with Palo Alto's people and forward-thinking resellers, TechMatrix steadily preached this new concept and the value of the products, overturning the conventional Japanese firewall market and opening up new markets.

In the course of Palo Alto's rapid growth, it has undergone many changes, including the addition of new features and the release of products and services due to corporate acquisitions. TechMatrix's pursuit of the business with a sense of speed and flexibility to keep pace with Palo Alto has earned us high commendation from Palo Alto as their top distributor in the last fiscal year, not only in Japan, but also in APAC (Asia-Pacific region).

Due to the impact of the pandemic in 2020 and increasingly sophisticated attacks, there has been a dramatic expansion in the need for the cloud-based security service, SASE (Secure Access service Edge), in addition to hardware next-generation firewalls, which had been our main business. As we anticipate demand for integration of security measures and services that automate operations with AI, our aim is to catch up quickly and contribute to the safety and security of our Japanese customers.



Makoto Nihashi  
General Manager of Sales  
Department 2,  
Network Security Division

Since joining the Company as a new graduate in 2002, Nihashi has been involved in technology and sales of multiple network security products. After working in sales since the start-up phase of the Palo Alto business in 2009, he is now the General Manager of the Sales Department that handles Palo Alto, F5, Dell Technologies, and other products. He is in charge of the development of TechMatrix's proprietary services and the launch of new products.

CASE STUDY Achieving Robust Security  
Security monitoring service to protect customer environments from sophisticated cyberattacks

TechMatrix Premium Support (TPS) is a security monitoring service that was launched in 2019. Security monitoring services constantly monitor the alerts of intrusion detection systems (IDS), which are security products that detect attacks on public systems by crackers (attackers). These services first appeared on the Japanese market in around 2000. TechMatrix has also provided a similar service under the name of TRINITY since 2013. To address new security threats, we have since launched a new service with greatly enhanced functions.

Security monitoring services have mainly covered "public systems" such as web servers. However, targeted attacks involving the theft of sensitive data by breaking into company intranets started to become prevalent around 2011, and ransomware attacks, in which the attackers encrypt the accessed data after infiltration and demand ransom, are now rampant. To counter these new threats, TPS features correlation analysis and detailed endpoint investigation functions.

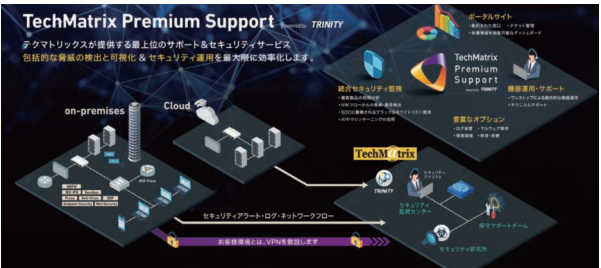
Correlation analysis is the analysis of the correlation between the alerts of multiple security products, making it possible to detect attacks that could not be detected in an individual event. The TPS correlation analysis engine, independently developed and operated by TechMatrix, automatically analyzes multiple alerts, enabling the wide-ranging, rapid detection of incidents. The correlation analysis engine is also updated as necessary based on the analysis to respond to new attacks.

Detailed endpoint investigation is usually conducted with products known as Endpoint Detection and Response (EDR). As EDR detects and protects against characteristic attacker

behavior, advanced skills are required to use it effectively. Here at TechMatrix, specialist engineers, who have advanced technical skills in conducting digital forensic analysis (detailed endpoint analysis), provide MDR\* services, involving detailed endpoint investigation with EDR. This makes it possible to detect and respond rapidly to risks in the customer's environment.

TPS is an enhanced security monitoring service for detecting and protecting against sophisticated cyber attacks. As I explained earlier, TPS has the distinctive features of correlation analysis and detailed endpoint investigation, but its real strength lies in the advanced technological skills of our security engineers who provide the service.

Cyberattacks are evolving day by day, but our engineers are also constantly improving their skills and devoting their efforts to the protection of our customers' environments.



Takashi Sayama  
General Manager, Security Laboratory

Sayama began his career in security as a SOC analyst in 2003, and he has worked as a security engineer and consultant for security companies and antivirus vendors. At TechMatrix, he is involved in a wide range of activities, including the launch and operation of the monitoring service, TPS, as well as individually engaging in the development of security AI and research of cyber security threats.

\*A product that protects against security threats that cannot be protected with conventional firewalls.

\*MDR (Managed Detection and Response): Service that provides real-time analysis of detection alerts of EDR products and remote detailed analysis.



### Strength.03

### Social Nature and Problem-Solving Abilities

We find potential social issues in the cybersecurity field, which can be described as part of social infrastructure, and fields with large social impact, such as medical and education. By building and providing solutions to solve those issues, we contribute to the development of a sustainable society.



### Strength.01

Foresight and Judgement

### Strength.03

Social Nature and Problem-Solving Abilities

By combining “Foresight and Judgement,” for reading and understanding changes in societal needs and advances in technology, with “Social Nature and Problem-Solving Abilities,” for solving issues by emphasizing the public and social good, we enter markets that have growth potential and high social impact at an early stage and solve various issues in the relevant fields, thereby creating social and economic value.



### CASE STUDY Solving the DX Issues of the Education Industry

### Offering unprecedented services to education settings nationwide

The EdTech Division provides “Tsumugino,” a school communication platform and school affairs support system, as a cloud service. School affairs include teachers’ duties, such as, at junior and senior high schools, entering the results of midterm and final exams and preparing report cards, management of attendance information, and management of basic information such as students’ names and addresses. Communication refers primarily to interactions between schools and guardians/students. It includes teachers’ receipt of students’ absence notices from guardians and guardians’ receipt of announcements from the school, and the achievement of two-way communication through a separate chat function.

Hiroshima Gakuin Junior & Senior High School adopted “Tsumugino” in August 2022 based on comparisons with existing systems and with other competing companies. The school had been attempting to improve its operational efficiency by integrating school affairs, health, communication and other functions for about 15 years, but had been unsuccessful due to a lack of vendors capable of providing such a service to the educational ICT market. At that time, the school encountered “Tsumugino,” which made it possible to integrate student attendance, grades information, timetables, facility reservation status, sick-bay information, and communication functions.

As one example of the operational efficiency improvement it has achieved, because student attendance information is automatically registered on the school affairs system, the school has been able to reduce the workload of clerical staff, who would, under a conventional system, need to enter the information into the system after receiving a telephone call from the student’s guardian. This function also assists with coordinating information within the school and mitigates the need to count students’ present and absent days manually using a paper-based attendance ledger. In addition, report cards, which were previously sent to each family in paper form, are now distributed digitally on “Tsumugino,” allowing students and guardians to review them whenever necessary. In this regard as well, whereas previously, it took time for teachers to print the report cards, place them in envelopes, seal them and send them, since the adoption of “Tsumugino,” these kinds of clerical tasks every term have been reduced and operations have improved significantly.

In addition, as “Tsumugino” is available as a cloud service, there is no need for schools to set up servers and other equipment or to assign an operations manager. Because TechMatrix is responsible for system maintenance and operation, schools that have difficulty appointing their own in-school information systems manager can rely on us for system operation, which will contribute greatly to reducing the burden on teachers in actual education settings.

Unlike regular companies, the difficulty faced by schools in appointing dedicated personnel in charge of system operation has meant a lack of progress in the establishment of information systems in schools. In this regard, “Tsumugino” supports education settings as an all-in-one system.



Hiroshima Gakuin Junior & Senior High School



**Naoya Shibayama**  
Manager,  
Tsumugino Solutions Sales Section,  
Tsumugino Solutions Sales  
Department,  
EdTech Division

After joining TechMatrix in 2013, Shibayama worked in sales in the CRM Solutions Division for eight years. He made proposals tailored to specific industry issues for call center customers in various industries, including automotive, electronics, finance, food, pharmaceuticals, media, and transportation. In 2021, he joined the EdTech Division (known then as the New Business Development Unit), where he now works on solving issues specific to the education industry with “Tsumugino.”

### CASE STUDY Contributing to the Creation of Information Infrastructure

### Okayama University Hospital’s initiative for use of medical information with PHR services

With the intention of making medical information accessible to everyone, TechMatrix launched its smartphone app-based PHR\*1 service, “NOBORI,” in 2020.

Just as we were considering our theory that university hospitals had particularly strong needs for sharing medical information with patients, given that many of their patients are suffering from difficult diseases and they cooperate with many other healthcare institutions, we received an opportunity to be introduced to Okayama University Hospital. In the course of our many meetings with Dr. Maeda, the Director of Okayama University Hospital, we learned about the challenges the hospital faced, namely (1) the need for healthcare coordination and cooperation within the region, and (2) the high barriers to the use of medical information for necessary research. Through those discussions, we obtained hints that PHR could provide a solution to these challenges. We immediately pursued a proposal for the use of medical information by building a mechanism for using PHR to approach patients directly.

After launching PHR at Okayama University Hospital in May 2022, our first task was to promote the use of PHR as infrastructure for coordinating medical information within Okayama Prefecture. In addition to the conventional coordination of medical records between medical facilities, our aim is for healthcare coordination and cooperation based on patient participation, in which patients themselves would share their medical information with the healthcare institutions that they attend.

We also had the opportunity to speak to Ms. Iwatani, Vice Director of Okayama University Hospital and Director of the hospital’s Department of Nursing. She told us that, while hospitals in many Western countries have access to case data after discharge in the order of several thousands of cases about the functional prognosis of ICU patients, hospitals in Japan are having extreme difficulty collecting similar case data.

We proposed that, if PHR could be used to obtain post-discharge data directly from patients, it may be possible to



Okayama University Hospital

gather a comparable amount of data in Japan as well. This led to the start of discussions to consider the use of the PHR app as the infrastructure for ePRO\*2. This initiative involves making clever use of PHR in areas where hospitals have, until now, faced difficulties in ascertaining the status of patients admitted to the ICU after they have been discharged, such as obtaining post-discharge prognosis information and information about medication side-effects.

By examining the issues from the same viewpoint as end-user healthcare institutions and addressing realistic challenges, we hope to extend our “NOBORI” smartphone app into a new means for regional cooperation and coordination and for communication between healthcare institutions and patients, and further, into an infrastructure for the support of medical research. In doing so, we hope to continue our efforts to solve the issues of healthcare settings.



**Tomomi Tanaka**  
Director and Division Director,  
New Business Development Division,  
PSP Corporation

Tanaka believes that listening to the people on the ground is the top priority for launching this new PHR business, and holds regular discussions with Dr. Maeda and Ms. Iwatani as she advances this project. The fact that it is such a complex subject, namely the disclosure of medical information, gives her a great sense of reward, and she visits healthcare institutions all over the country on a daily basis.

\*1 Abbreviation of Personal Health Record.  
\*2 Abbreviation of electronic Patient Reported Outcome.



## Solving Social Issues Through Business Activities

Through a diverse range of business activities, the TechMatrix Group provides new value and contributes to the achievement of the SDGs for a sustainable society.



Social issues (17 SDGs targets)	Solution	CASE	Value provided	
<b>Industry, Innovation and Infrastructure</b> 	 <b>TechMatrix Premium Support</b> <small>powered by TRINITY</small>  <b>Information Infrastructure Business</b> Information security	Cyberattack protection and security enhancement for customers <b>Integrated security monitoring service TechMatrix Premium Support</b> Developed independently by TechMatrix, the service tackles increasingly advanced and sophisticated cyberattacks and maximizes the efficiency of comprehensive threat detection and visualization, as well as security operations.	<b>Issue</b> Theft of important information and business suspension due to cyberattacks have become a threat to society, and a higher level of security measures are sought after.	<b>Solution</b> Our service comprehensively monitors attacks against user devices, internal system, and network environments, and conducts correlation analysis. It thereby strengthens security infrastructure against all types of powerful cyberattacks, including malware.
<b>Good Health and Well-being</b> 	 <b>Parasoft C++test</b>  <b>Application Services Business</b> Software quality assurance	Development support for cars of the future <b>Provision of C++test, a static analysis and unit test tool</b> The all-in-one C/C++ test tool improves efficiency with its static analysis (coding rule check/flow analysis), unit test, coverage measurement, runtime memory error, and other functions.	<b>Issue</b> An enormous amount of effort is necessary to ensure software quality, such as functional safety standards ISO 26262, which is considered essential in automobile development, and coding rules MISRA, CERT, and AUTOSAR, which are de facto standards.	<b>Solution</b> C++test improves quality and productivity, as it is used in the software development for advanced driver-assistance systems (ADAS), a highly effective technology to avoid and mitigate collision, protect pedestrians, and prevent and mitigate automobile accidents in other ways.
<b>Decent Work and Economic Growth</b> 	 <b>FastHelp5</b>  <b>Application Services Business</b> CRM	More efficient contact center operations <b>Contact center CRM system FastHelp5</b> In accordance with the industry and purpose, the system centrally manages customer information and all types of contact history gathered at contact centers (call centers) via telephone, email, FAX, the internet, and other means.	<b>Issue</b> Contact centers receive a large number of inquiries via various channels, such as telephone, email, and chat, and are busy responding to them. It is also difficult to increase staff due to labor shortages. Increasing the level of customer satisfaction while responding to inquiries with limited staff resources has been an issue.	<b>Solution</b> Our system enables customers to centrally manage customer information and response history, as well as to provide omni-channel support. It thus improves the productivity and quality of contact centers, thereby increasing the level of customer satisfaction. In addition, accumulating customers' voice and other CRM data and reflecting them in management will contribute to corporate value improvement.
<b>Reduced Inequalities</b> 	 <b>ARECCIA</b>  <b>Application Services Business</b> Business solutions	Business solutions for financial service sector <b>Provision of market-based business management systems (front and middle systems) mainly to financial institutions</b> To ensure the financial health of banks, we provide risk monitoring functions that satisfy various international financial regulations implemented by the Basel Committee on Banking Supervision.	<b>Issue</b> Financial engineering is expected to manage uncertainties as probability events using a reasonable model. Specific examples include the calculation of market value (fair value) of future financial transactions and the estimation of risks upon the occurrence of a financial crisis.	<b>Solution</b> Combining global-standard financial instrument valuation models with in-house developed platforms that power the models, we realize an integrated risk management system that includes increasingly complex structured transactions.
<b>Quality Education</b> 	 <b>ツムギノ</b> <small>tsumugino</small>  <b>Application Services Business</b> EdTech (Education)	Educational platform system <b>School communication platform + cloud-based school affairs support service "tsumugino"</b> With a unique child-centered design, "tsumugino" centralizes the accumulation of learning outcomes and school support for teachers and other school staff, in addition to providing a wealth of functions for communication within and outside schools.	<b>Issue</b> Issues include school environments where digitalization, such as going paperless, is not making progress; efficiency improvement to reduce the burden on teachers and other school staff; making the time for teachers and other school staff to interact with children; support for children's inquiry-based learning; and the use of learning and school affairs data to adapt to the advancement of education.	<b>Solution</b> We realize a safe and secure cloud system for a one-stop service to centrally manage learning history and other school information and handle school affairs more efficiently. The service also allows users to share information within and outside schools by integrating school affairs functions with communication functions, and to support inquiry-based learning customized for each child.
<b>Good Health and Well-being</b> 	 <b>NOBORI</b> <small>みんなの明日へ、医療情報クラウド。</small> <b>Medical information platform</b>  <b>Medical Systems Business</b> Medical	PHR services <b>Personal health record (PHR) app NOBORI</b> NOBORI is a service that allows general consumers and their families to refer to medical information from their smartphones. Such information includes test results from medical institutions, information on medication, and images.	<b>Issue</b> People can rarely see detailed medical information, even though it is information about themselves. In addition, information asymmetry in medicine is an issue, where it is impossible to manage different forms of paper-based records at each hospital.	<b>Solution</b> Our PHR services realize a new style of medicine by managing consultation and health checkup results chronologically with images and test figures, allowing patients to learn about such information by themselves, and enabling them to share it with family members and other hospitals.
<b>Quality Education</b> 	 <b>プラチナくみん</b> <small>キャリアサポートしています</small>  <b>Application Services Business</b>	TechMatrix's <ul style="list-style-type: none"> <li>Human resources development</li> <li>Career development support</li> <li>Support for acquiring qualifications</li> <li>Promotion of women's success in the workplace</li> <li>Creation of an organizational climate</li> <li>Employee engagement</li> </ul> Materiality: Training and Education ▶ P.45 Materiality: Diversity and Equal Opportunity ▶ P.47	<b>Issue</b> Continuous upskilling by each employee, as well as knowledge acquisition and updating, is essential for a company's constant growth and new value creation, the source of which are considered to be human resources.	<b>Solution</b> We implement training programs to develop next-generation leaders, as well as human resources with advanced IT skills. Relevant initiatives are constantly in place, such as the Career Challenge System. In addition, we received "Platinum Kurumin" certification in recognition of our efforts to promote women's success in the workplace.