

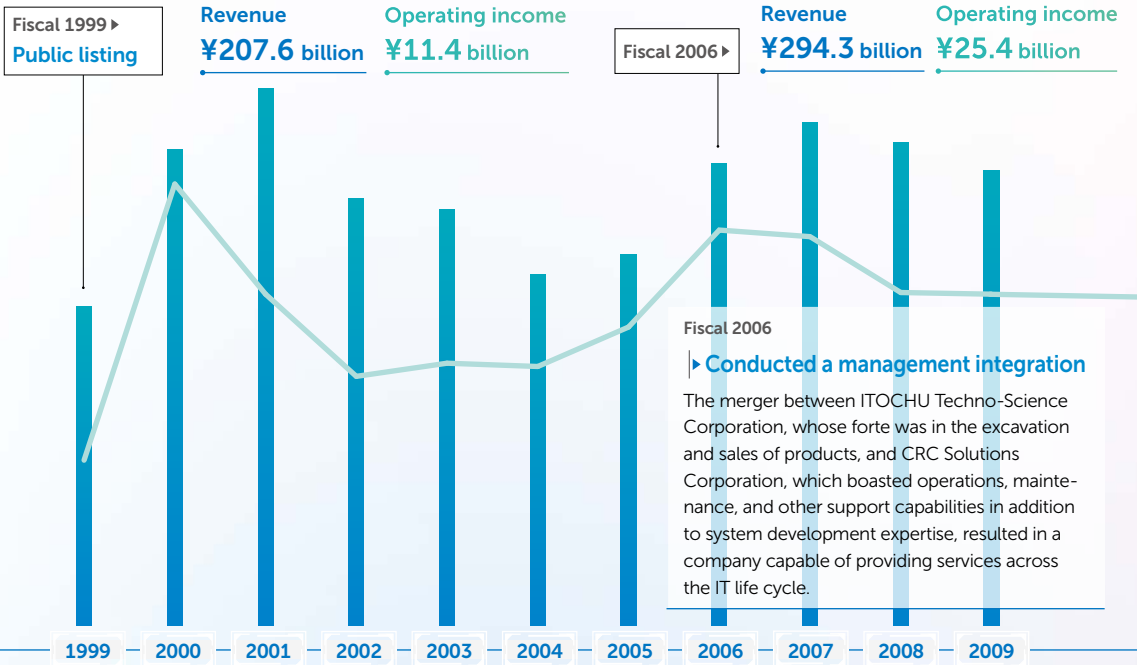
History

Swiftly Addressing Changes to Deliver Continuous Growth

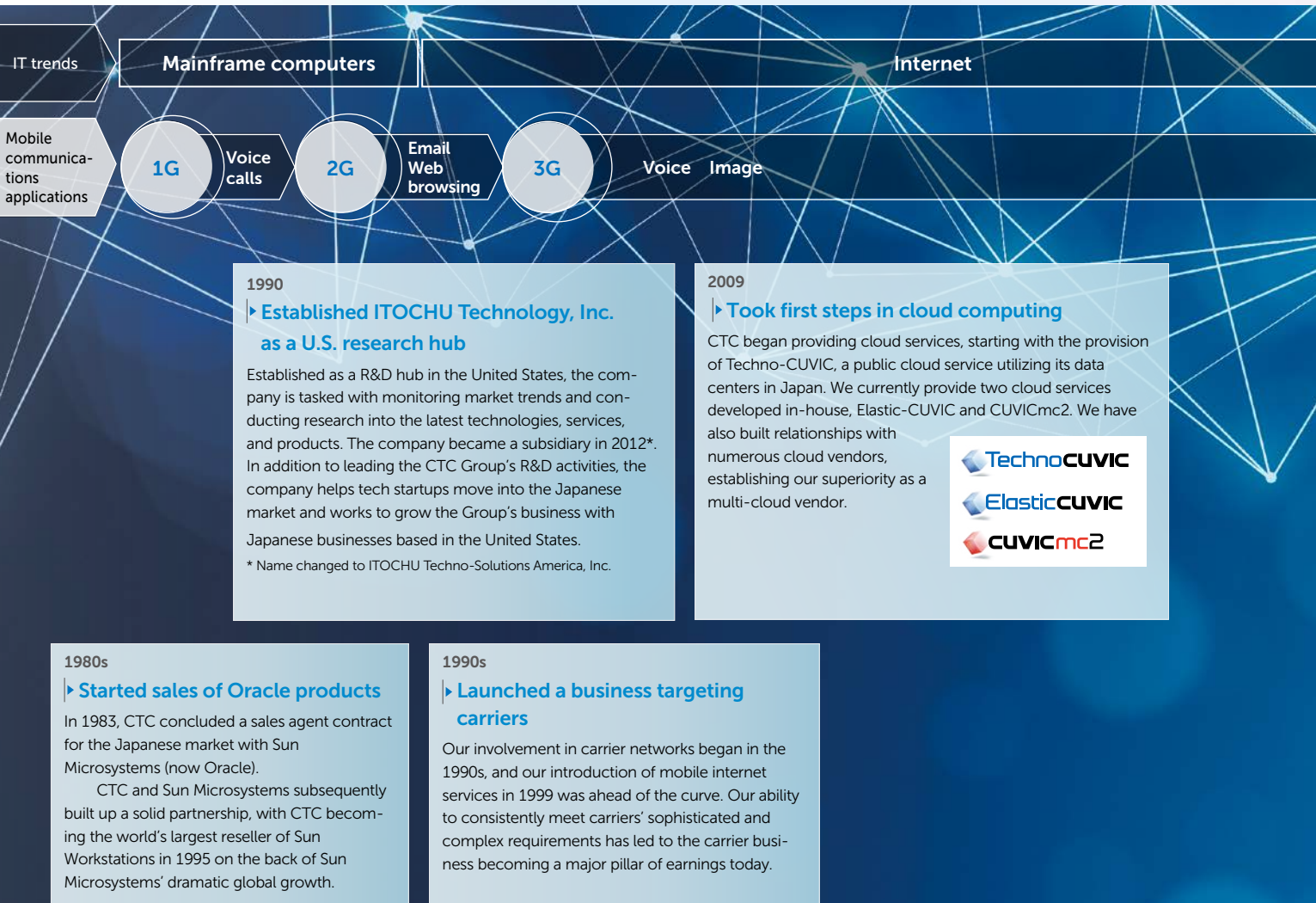
1972

▶ **Established as a business operator within the ITOCHU Group**

CTC's predecessor, C. ITOH Data Systems Co., Ltd., was established. As a subsidiary of a trading company, the new company's business revolved around customizing and selling the best products from around the world to Japanese clients. CTC's business model, which emphasizes the building of infrastructure, continues to this day.



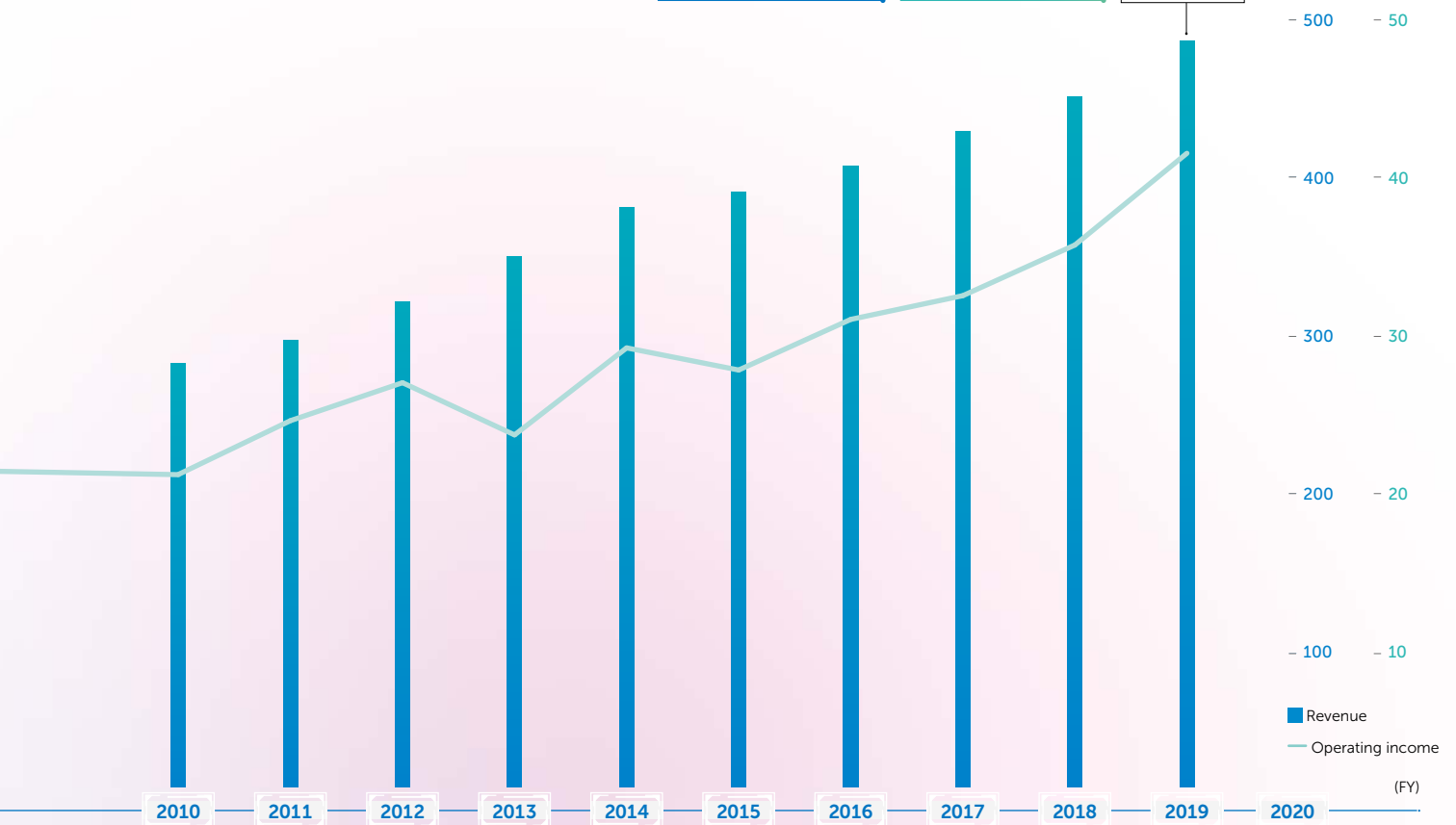
1970- 1980- 1990- 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009



Revenue **¥487.0 billion** Operating income **¥41.6 billion**

◀ Fiscal 2019

(¥ billion)



Cloud

DX

4G

Video Gaming IoT

5G

Enhanced Mobile Broadband (eMBB), Ultra-Reliable and Low Latency Communications (URLLC), and massive Machine Type Communication (mMTC)

2013 | Acquired two companies in the ASEAN region, and began globalizing

To provide our clients with global support and expand our business on a global scale, we acquired CSC Automated and CSC ESI*, which have extensive client bases in Singapore and Malaysia. This move launches us into the ASEAN market, which is expected to grow at one of the fastest rates within the IT industry, and spearheads CTC's efforts to develop its global business.

* Renamed CTC GLOBAL PTE. LTD. and CTC GLOBAL SDN. BHD.

2018 | Opened a space dedicated to agile development


As one of our initiatives in the area of agile development, which aims to enhance development speed and respond flexibly to change, we set aside dedicated locations in Tokyo and Aichi Prefecture. Agile development is a new methodology aimed at responding to client needs in a timely manner by developing applications capable of responding to an ever-changing operating environment. CTC's ability to respond to this methodology for making development faster and more efficient sets the Company apart in the development and system integration (SI) domains.

2019 | Foundation established to develop next-generation human resources

We are committed to fostering next-generation human resources that support IT while contributing to society through our business. Reflecting this commitment, we established the ITOCHU Techno-Solutions Future Foundation, which will engage in unique activities centered on IT-related scholarships and education-related businesses. Through educational projects, such as scholarships and workshops, the foundation has started support activities for children, adolescents, and youths with disabilities who aspire to pursue careers in IT.

2017 | Established Institute of Open Innovation Research "MIRAI"

We established the Institute of Open Innovation Research "MIRAI" with an organizational mission to cultivate and develop leading-edge technologies and create a new business model. In October, we opened DEJIMA, a dedicated space for open innovation, to facilitate the creation of new businesses among clients and startup companies.



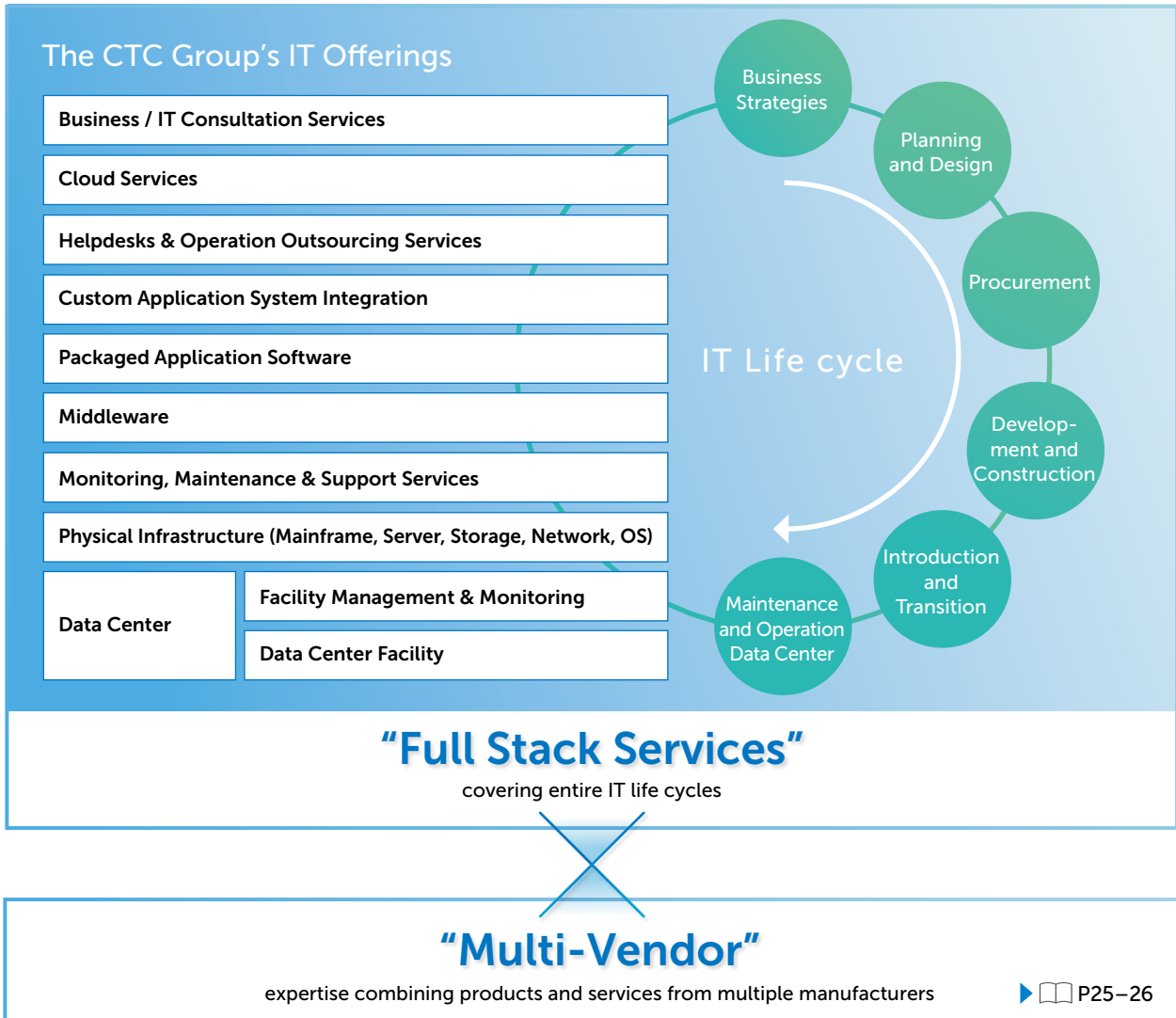
2019 | Acquired of two Indonesian IT companies

CTC acquired two local IT companies in Indonesia: PT. Nusantara Compnet Integrator, which has strengths in system construction, and PT. Pro Sistimatika Automasi, whose core business is application development. Through these acquisitions, we will establish a system covering all of the ASEAN region to further expand our global business.

Business Model

Cultivated Business Model

Identify excellent products from around the world and connect them to customers



"Full Stack Service + Multi-Vendor": Resolving Customer Issues with Innumerable Combinations

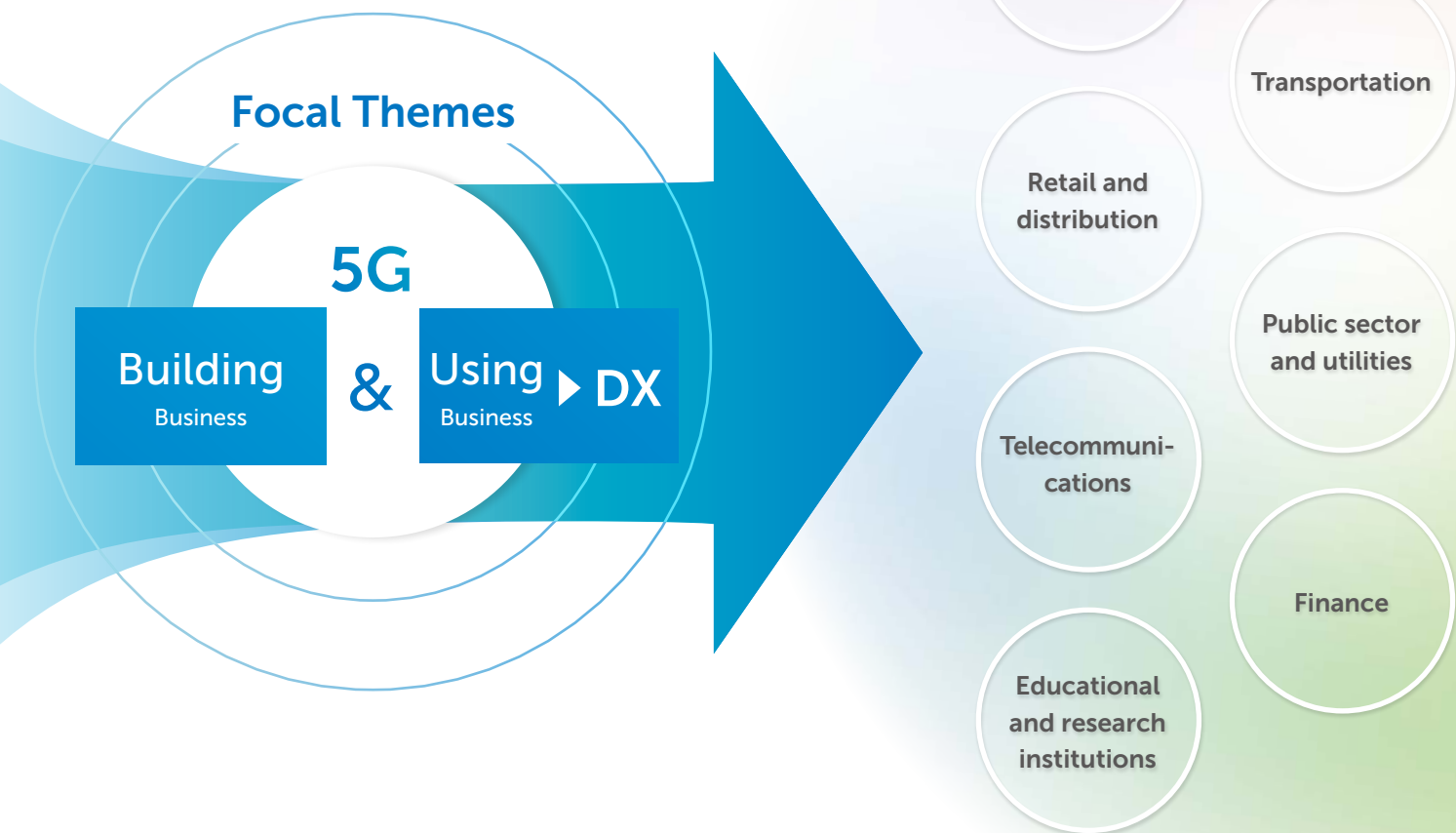
Since its foundation, CTC has adopted a customer-focused business model that entails identifying excellent products and services around the world and connecting them to provide optimal solutions. The collection of technologies and know-how accumulated in this process is reflected in the "Full Stack Services + Multi-Vendor" approach that symbolizes our business model.

Our "Full Stack Services" covers all processes in the IT life cycle, from business strategy formulation to operation and maintenance, as well as all the IT technologies needed to support these processes. As such, we are a "Multi-Vendor" that is independent of the products and services of a particular manufacturer. By making connections and combinations from the innumerable options available, we can develop the best and most innovative solutions for our customers. Our client

companies operate in a wide range of industries and have diverse challenges and needs. To meet their requirements, we propose improvements to products and services offered by manufacturers and compensate for any technological deficiencies through our own in-house development. In these ways, we continue to search for optimal solutions.

As digital transformation (DX) gathers pace, technology will become more deeply rooted in not only corporate management strategies but also society itself. Moreover, it will be deployed by people in all age groups, from children to the elderly. We will continue making maximum use of our "Full Stack Services + Multi-Vendor" model to address business environments that require scalability, flexibility, and speed.

Products and services around the them to provide optimal solutions



Creating and Deploying 5G Technologies through DX to Accelerate the Creation of a Prosperous Society

At CTC, our future focuses will be on DX and its premise: 5G next-generation mobile communications systems. In the 5G world, characterized by Enhanced Mobile Broadband (eMBB), Ultra-Reliable and Low Latency Communications (URLLC), and massive Machine Type Communication (mMTC), CTC will take on challenges in business that both “build” and “use” networks.

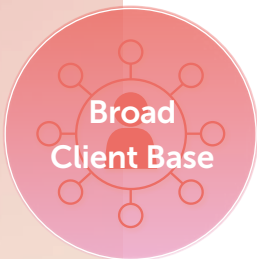
Leveraging our track record and knowledge in building networks for major telecommunications providers over many years, we will address the more advanced and sophisticated technical requirements of customers and demonstrate our presence in the domain of businesses that “build.” Moreover, businesses that

“use” 5G will use it to connect all kinds of “things” to networks, creating a world in which information is sent and received in real time and fueling the emergence of numerous new industries. In addition to its business know-how in “building” 5G, CTC has a track record of using technologies in a wide range of industries to help resolve its customers’ operational issues. Accordingly, we will become a strong partner for companies that seek to promote DX. In businesses that “build” and “use” 5G, we will leverage our “Full Stack Service + Multi-Vendor” approach to seize more and more business opportunities.

Strengths Using Our Strengths to Earn the Trust of Customers

The Ability to Create New Businesses with Clients

With IT slated to play an indispensable role in society as a whole, DX is expected to gather more and more momentum. This is because DX will utilize IT in spaces where new, unprecedented business will be created. System integrators are called on to help clients realize these aims by connecting their growth strategies with leading-edge technologies. The CTC Group, which has attracted clients and amassed operational know-how across a host of industry sectors, collaborates with myriad partners to foster its innovative capabilities and help create new businesses to support society.



Client base:
Approx.
10,000
companies

▶ Clients and Operational Know-How Spanning a Host of Sectors

CTC's clients span a broad range of industries—including telecommunications, finance, manufacturing, and public-sector entities with large-scale systems—that rely on 24/7 uptime. The sophisticated operational expertise and specialized knowledge we have amassed through our business in these areas over the years is the wellspring of our ability to respond to new client issues and a source of strength.



Number of events of the DEJIMA open innovation space (Fiscal 2019):
132
Investments by CTC Innovation Partners:
6 projects

▶ Future-Oriented Service Focused on Creation in Collaboration with Clients

CTC works with clients to create new businesses and expand their lines of business by leveraging the relationships with a wide range of partners and the leading-edge technologies we have cultivated in Japan and overseas.

To further prepare the groundwork for innovation, in 2017 we established the Institute of Open Innovation Research "MIRAI," developed an open innovation space called "DEJIMA", and established CTC Innovation Partners as a corporate venture capital (CVC) firm. ▶ □□ P29



Subsidiaries and affiliates in Japan and overseas:
27
Development partners:
Approx.
1,000
companies

▶ Strong Relationships with Partners in Japan and Overseas

In addition to joint ventures with vendors, system integration (SI) partners, and customers, we have formed capital alliances through investments in startups and built robust relationships with ITOCHU Group members and others. We also collaborate with universities to engage in human resource development and conduct research that leverages our mutual strengths. Such collaboration enables us to proactively create a framework that embraces change with new businesses, one that we would be unable to develop solely with our own resources.

▶ □□ P27-28

The Ability to Build New Businesses by Harnessing IT

The CTC Group has built relationships with leading domestic and international vendors over many years. The leading-edge products and technological information that we obtain from them has helped us to hone the technological skills required in system development. While systems are expected to become more sophisticated and advanced in the years ahead, we will demonstrate our presence by utilizing our “keen eye” to identify the latest technologies and our “technological capabilities” to connect them.



Silicon Valley relationships:

30 years

Vendor partners:

More than 300 companies

▶ A Keen Eye for the Latest Technologies and an Unrivaled Choice of IT Products

We maintain a vigilant lookout for superior vendors in Japan and overseas in our effort to deploy numerous products and technologies, as well as cloud and other services. We have created a niche as a system integrator with multi-vendor and full stack technologies—able to propose optimal solutions across the entire IT life cycle by connecting multiple products and services. We have one of the strongest track records with leading vendors of any company in Japan, which also leads to solid advantages on the pricing front. ▶ [P25–P26](#)



Engineers:

14,582

People with vendor certifications:

9,586

▶ Teams of Engineers That Can Integrate the Latest Technologies

CTC has built up its technological capabilities by embracing the challenges posed by new technologies and pursuing measures to resolve the true issues that clients face. This approach has earned us trust from our clients and led to the accumulation of expertise. CTC applied its ability to build IT infrastructure in a multi-vendor environment, cultivated over many years, to the carrier-oriented business it launched in the 1990s. We harness these skills to develop services and applications that bolster our clients' competitive advantages. ▶ [P23–26, 61–62](#)



Nationwide maintenance and support network

Overseas support structure:

881 people
in **5** countries

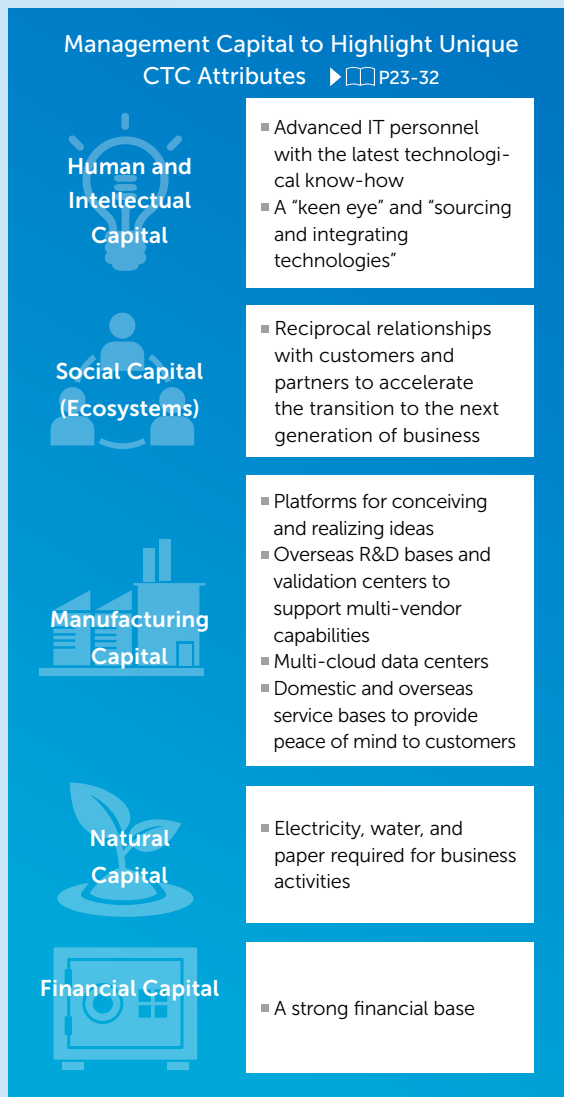
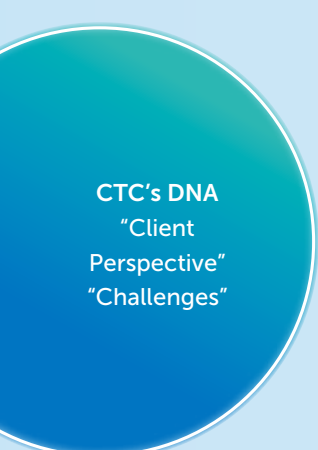
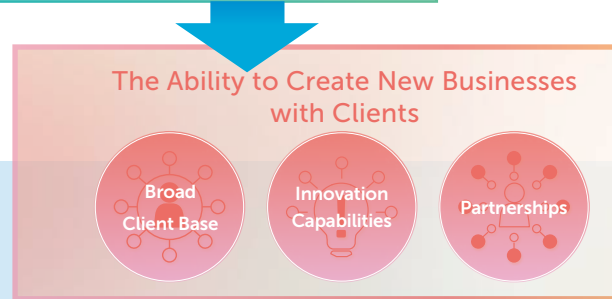
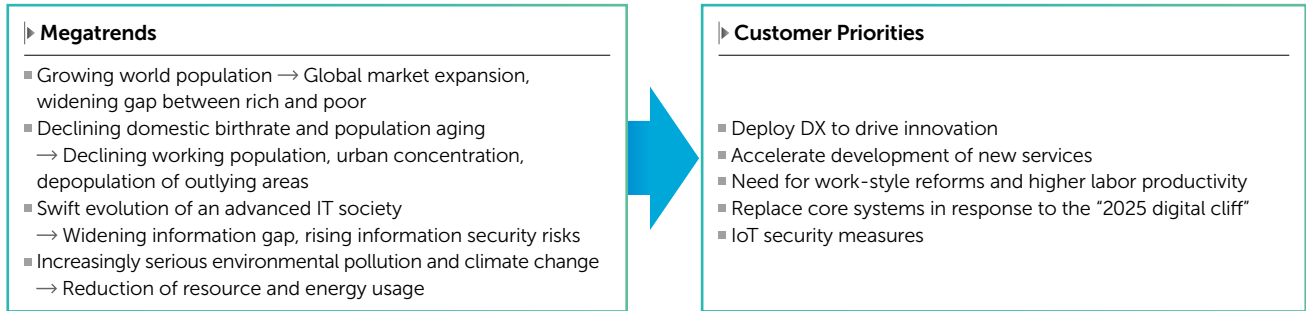
▶ Support Framework Linked with New Business

As a multi-vendor, the CTC Group goes beyond just procuring products and building infrastructure. We also provide post-installation operational and maintenance support, which requires us to understand the features of deploying products from multiple vendors across complex system environments. The support capabilities of the CTC engineers who facilitate the stable operation and maintenance of extremely complex systems earn a high degree of trust and provide an important reference point for new business. ▶ [P31–32](#)

Value Creation Model

The CTC Group's Value Creation Process

The CTC Group's corporate mission is "leveraging IT's potential to change future for the Global Good." To this end, we will mobilize our unique strengths to address the issues and needs of customers and society through our business. With "Client Perspective" and "Challenges" inherent in our DNA, we are enhancing our management capital, which is the wellspring of value, in an ongoing effort to reinforce our business model.



Business Model ▶ P13-14

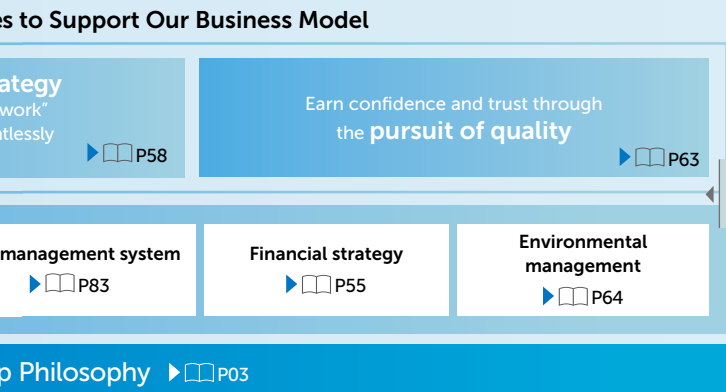
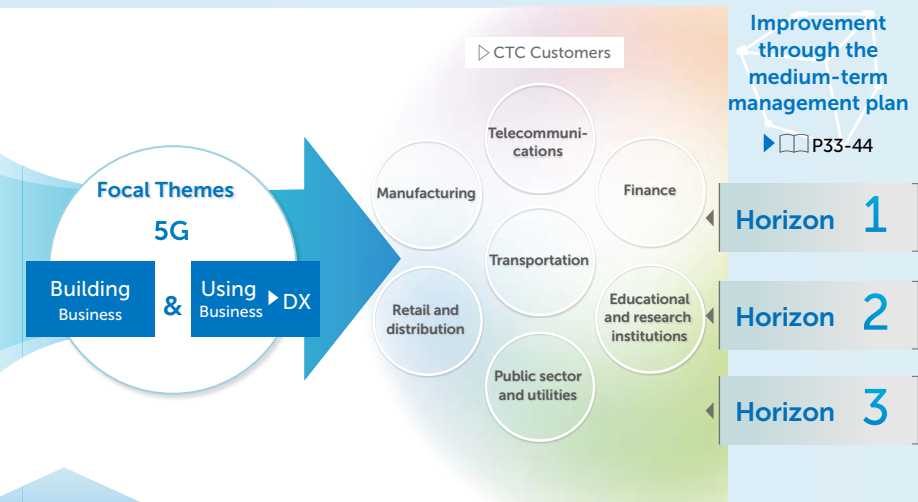
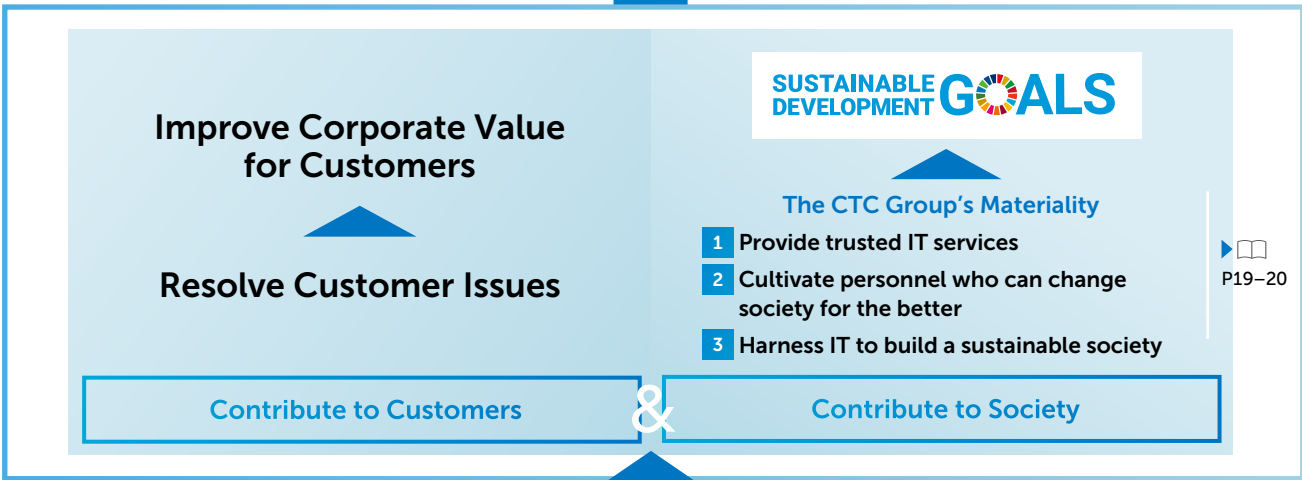


Systems and Initiatives



MISSION

Leveraging IT's potential to change future for the Global Good



Materiality

Providing Value to Society

▶ The CTC Group's Approach to Materiality

Based on the two axes of management and impact on stakeholders, the CTC Group has identified material topics (materiality) and is working to address them. Needless to say, the main focus of business is to help improve corporate value by resolving the problems of client companies. However, we also want to be an entity that provides value to society. We do this by pinpointing social issues from the perspective of client companies and delivering optimal solutions to address them.

▶ Identifying Material Topics

In March 2016, we identified material topics (materiality) that the CTC Group should focus on. This followed a process of obtaining feedback from stakeholders based on the social issues highlighted by CSR evaluation organizations, including international guidelines on sustainability. We then set specific materiality targets and key performance indicators (KPIs) and are using the plan-do-check-action (PDCA) cycle to evaluate each initiative.

■ Participation in United Nations Global Compact

On July 20, 2015, the CTC Group signed up to the United Nations Global Compact (UNGC), an initiative to achieve sustainable growth in the international community.

We support the UNGC's 10 principles in four key areas: human rights, labor, the environment, and anti-corruption.



▶ Material Topic Assessment Process



Add

1 Provide trusted IT services



1-1 Ensure rigorous information security

See also ▶ P84

- Number of serious accidents Target: **0** ▶ Achieved
- Training attendance rate Target: **100%** ▶ Achieved

1-2 Improve quality

See also ▶ P63

- Number of serious system failures Target: **10% year-on-year decrease** ▶ Not achieved (10% increase)
- Customer evaluation of system quality* Target: **85%** ▶ Achieved (89%)

* Percentage of respondents who answered "Similar to competitors" or higher in the system quality evaluation section of our customer satisfaction survey

1-3 Compliance

See also ▶ P85

- Number of serious compliance violations Target: **0** ▶ Achieved
- Training attendance rate Target: **100%** ▶ Achieved

We compiled a list of 27 candidates for material topics based on a wide-ranging review of our corporate philosophy, the Generation 4 Global Reporting Initiative Guidelines (G4 Guidelines), the United Nation's Sustainable Development Goals (SDGs) and disclosure requirements set out by institutions that use socially responsible investing (SRI) strategies.

We carried out a survey of our stakeholders, asking them to evaluate the importance of each of the 27 material topic candidates.

Based on the results of the stakeholder survey, we carried out a dialogue with experts to narrow down the material topics the CTC Group should tackle. We then evaluated and organized their proposals and suggestions from both a qualitative and quantitative perspective.

Based on the survey results, we created a Materiality Map visualizing the impact of each of the 27 material topic candidates on our business and stakeholders using concrete figures. As the final step in the verification process, we asked CTC's management executives to review the material topics.

We extracted materiality, the areas that the CTC Group should address as a matter of priority in terms of the impact on its business and stakeholders, and then reflected our corporate philosophy in more straightforward terms.

Comments from Expert

Yoshinao Kozuma
Professor, Sophia University, Faculty of Economics

Businesses should be beneficial to both society and company. Especially in the IT sector, the amount of electricity consumed by data centers increases in proportion to business scale. While measures are required to address energy consumption, CTC can also use its IT service capabilities to conceive ideas that convert risks into business opportunities.

Mariko Kawaguchi
Chief Researcher, Daiwa Institute of Research

Rather than focusing only on how much profit can be produced, CTC needs to consider strategies and policies based on how it can provide benefits to the society as a whole.

Hitoshi Mitomo
President, Japan Society of Information and Communication Research
Professor, Graduate School of Asia-Pacific Studies, Waseda University

Companies need to create businesses that dovetail with a sustainable society. If IT services are accepted by society as a tool for solving problems, CTC can help to build a sustainable society through its business activities.

Note: Data, organization names, and job titles in the above are valid as of October 2016.

Addressing the CTC Group's Material Topics

Fiscal 2019: KPI Review

2 Cultivate personnel who can change society for the better

2-1 Conduct personnel development and training

See also ▶ P23–25, 61–62

■ Career follow-up interview rate

Target: **100%** ▶ **Achieved**

2-2 Promote diversity and change work styles

See also ▶ P44, 59–60

■ Enhancing diversity and work-style reform measures

▶ **Promoted lesbian, gay, bisexual, and transgender (LGBT) initiatives and sexual orientation and gender identity (SOGI) initiatives and implemented work-style reform measures**

■ Paid leave uptake rate

Target: **70%** or higher ▶ **Achieved** (72.6%)

Employees who took fewer than

five days of paid leave Target: **0** ▶ **Achieved**

2-3 Help cultivate people who can be a bridge to the next generation

See also ▶ P44, 61–62

■ Contributing to an increase in advanced IT human resources

▶ **Held a symposium on "fostering data scientists to drive the AI era"**

▶ **Established the ITOCHU Techno-Solutions Future Foundation**

■ Held "future realization IT classes"

Target: **12** times ▶ **Achieved** (14 times)

3 Harness IT to build a sustainable society

3-1 Address issues related to an aging society

■ IT solutions that help to address the declining birthrate and population aging

▶ **Provided IT solutions to address labor shortages and long-term care needs**

3-2 Reduce environmental impact

See also ▶ P64–67

■ IT solutions that help to reduce environmental impacts

▶ **Provided IT solutions for effective use of resources**

■ Reduce CO₂ emissions from our businesses

Target: 30% reduction from the fiscal 2015 level by 2030

▶ **19.7% reduction**

■ Number of serious environmental law violations

Target: **0** ▶ **Achieved**

3-3 Contribute to regional economies

■ IT solutions that contribute to local economies

▶ **Stepped up introduction of IT solutions in rural areas**

▶ For more information on the results of our KPI review, please visit our corporate website. <http://www.ctc-g.co.jp/en/corporate/csr/policy/materiality.html>