



Customer Service

✓ Achieved ↑ Exceeded — Missed Target

Strategies

2030 Goals

2021 Targets

2020 Achievements



Precise Response

Provide excellent customer service through close collaboration with customers and customer meetings/surveys on a regular basis to understand and respond to their requirements and feedback



Virtual Fab

Provide comprehensive information in a timely manner to ensure the success of customer's products; strengthen processes and systems to protect customer product information to the highest standard

▪ Maintain customer satisfaction rating of over **90%**

▪ Maintain customer satisfaction rating of over **90%**

▪ Customer satisfaction rating of **92.8%**; seven consecutive years with **> 90%** satisfaction
Target: > 90%



▪ Reduce cases of problematic engineering quality or poor reliability to **60%** of the level in 2019 for every million 12-inch wafers shipped

▪ Reduce cases of problematic engineering quality or poor reliability to **70%** of the level in 2019 for every million 12-inch wafers shipped

▪ Reduce cases of problematic engineering quality or poor reliability to **70%** of the level in 2019 for every million 12-inch wafers shipped
Target: 95% of the level in 2019



▪ In line with TSMC's technology roadmap, TSMC provides customers with over **1,200** types of available wafer manufacturing and process technology, and over **170** types of advanced packaging technology

▪ In line with TSMC's technology roadmap, TSMC provides customers with over **860** types of available wafer manufacturing and process technology, and over **85** types of advanced packaging technology

▪ In line with TSMC's technology roadmap, TSMC provides customers with over **833** types of available wafer manufacturing and process technology, and over **77** types of advanced packaging technology
Target: 800 types of technology and 60 types of advanced packaging technology



▪ Pass customer product information audit with no major flaws

▪ Pass customer product information audit with no major flaws

▪ Pass customer product information audit with no major flaws
Target: No major flaws



Customer trust is TSMC's core value. We believe that TSMC's competitiveness hinges on how competitive our customers are and that our customers' success is also our success. In order to provide customers with the highest level of service, TSMC has established a devoted customer service team, which is a dedicated coordination window to provide timely assistance and creates the best customer experience, from design support, mask making, and wafer manufacturing to backend services. TSMC also commits to protecting proprietary customer information to the highest standard to develop a long-term partnership and become a long-term and trusted partner that is critical to their success.

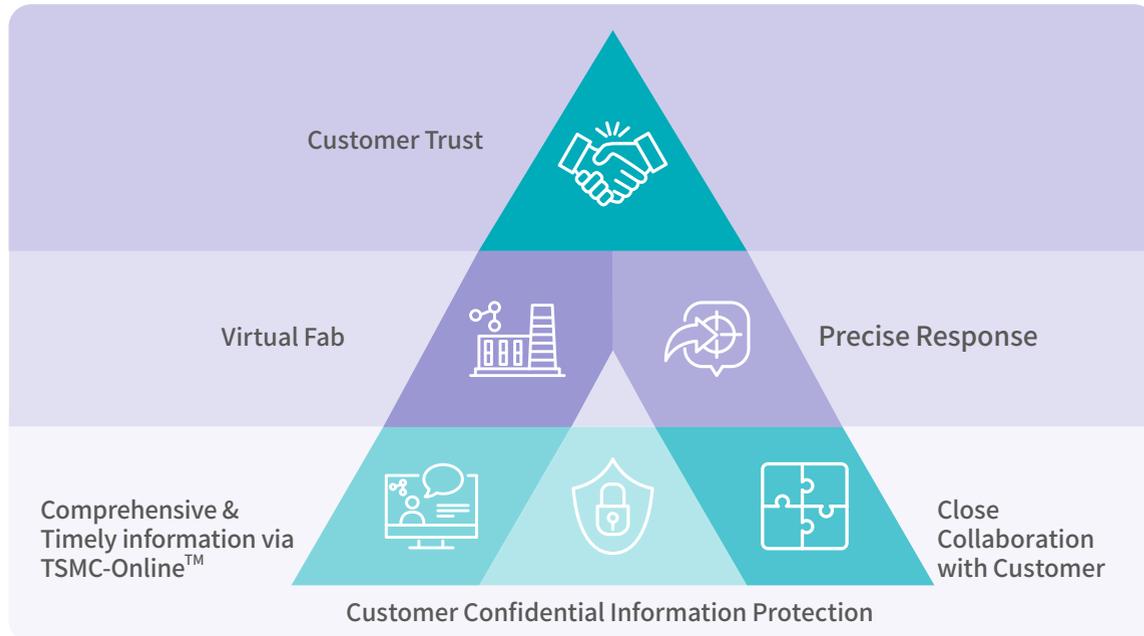
Precise Response

Customer feedback and opinions are important foundations for advancing customer relationships. TSMC learns about customer needs through irregular meetings, quarterly reviews, and annual satisfaction surveys. The channels are a way for customers to provide feedback on the performance of business behavior, relationship, technology, quality, yield, design support, manufacturing, customer service, and further expectations for the future. TSMC regularly reviews and analyzes customer feedback to propose optimal solutions. By having a comprehensive response process to customer needs, TSMC continues to

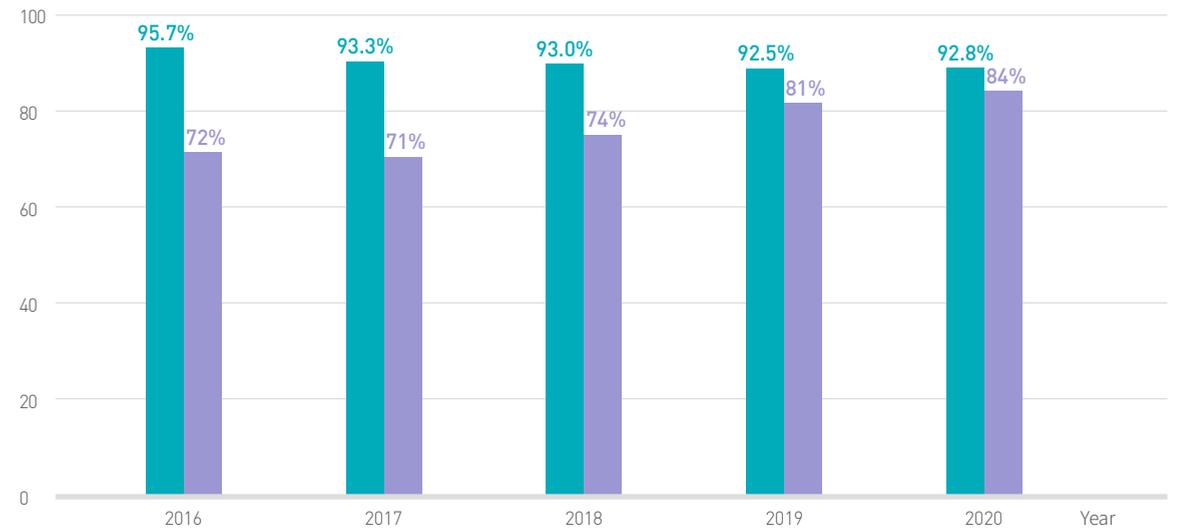
advance customer relations. In 2020, under the COVID-19 pandemic, TSMC held a total of 1,205 online meetings with 163 customers, 115 quarterly reviews with 31 customers, and annual satisfaction surveys with nearly 200 customers. Responding to customer expectations for convenient access to technical files and higher response efficiency to business needs, TSMC established a smart technical file navigation system and further reviewed and simplified project review, quotation, and contract signing processes to increase response speed to customer's business needs. The annual customer satisfaction rating in 2020 was

92.8%; maintaining high ratings of above 90% for seven consecutive years. Customers responded positively to the new, streamlined business process in the customer satisfaction survey. Satisfaction ratings from customer service items evaluated quarterly also reached over 80%. In response to a rapidly changing market, TSMC is working closely with customers to continuously satisfy their needs with advanced technology, manufacturing excellence, and high-quality services.

Customer Service Strategy Pyramid



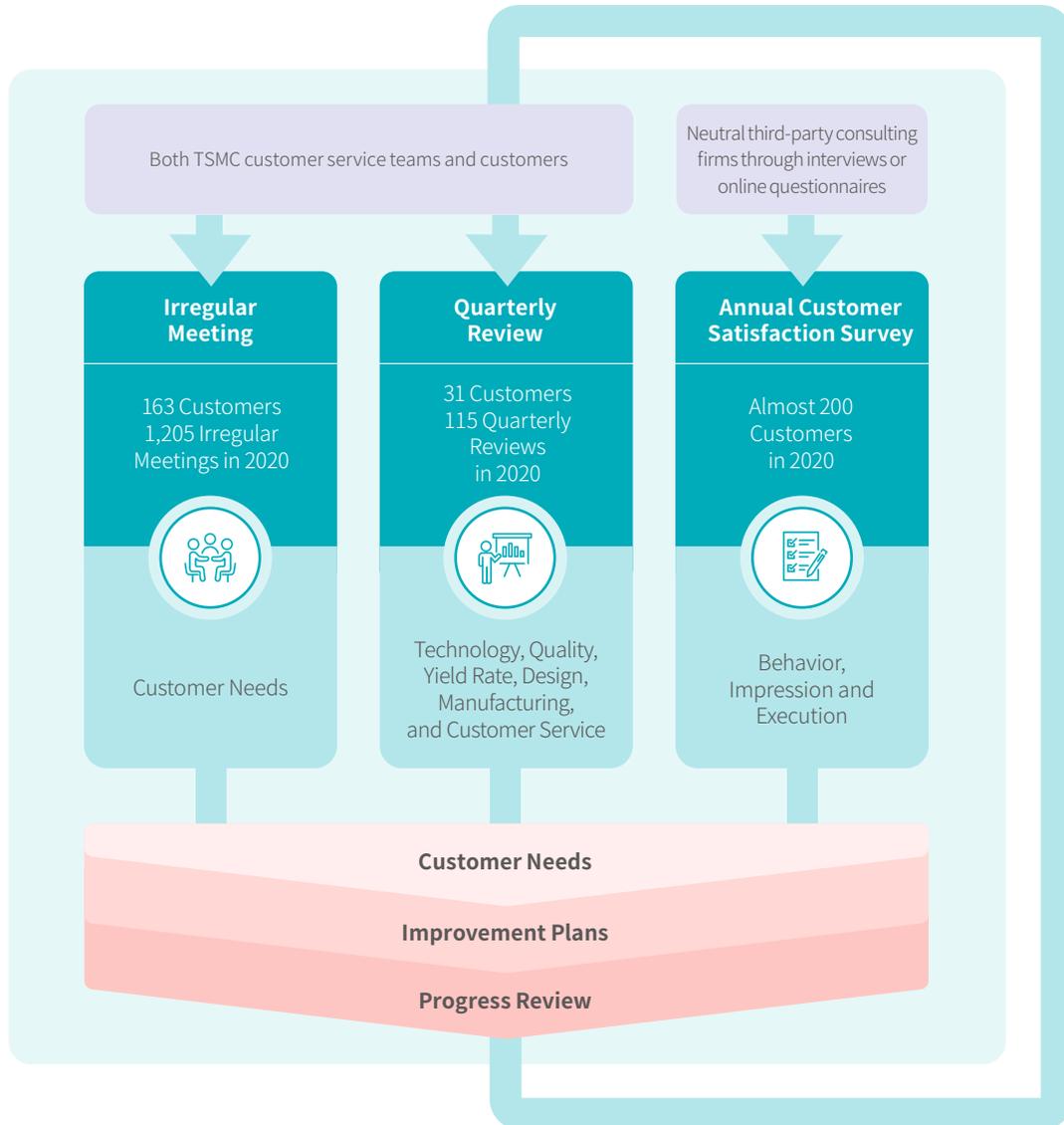
Annual Customer Satisfaction



■ Annual Customer Satisfaction ■ Quarterly Business Review (QBR) Customer Service Satisfaction

Note: Figures for customer satisfaction ratings in 2020 are from TSMC fabs in Taiwan and subsidiaries.

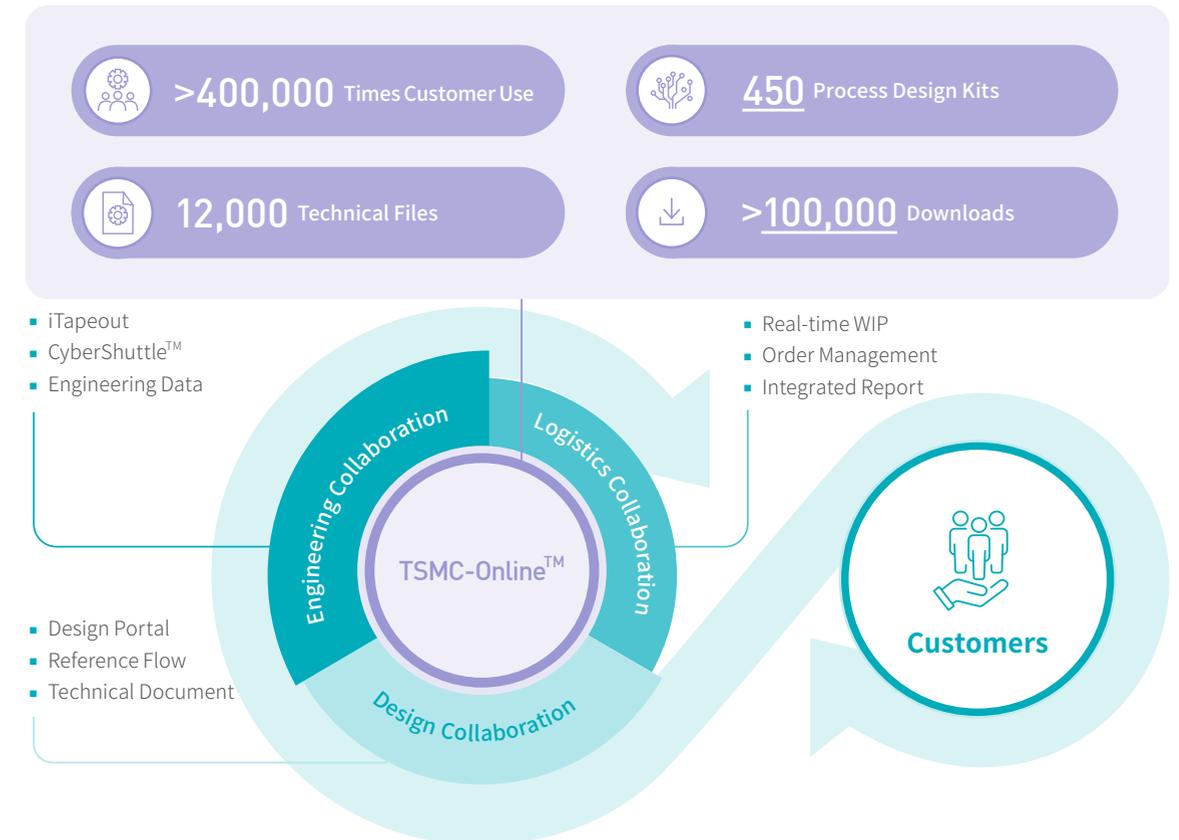
Various Communication Channels for Customers



Virtual Fab

Real-time interaction and information exchange as well as comprehensive protection for proprietary customer information are critical for TSMC to build customer trust. For real-time interaction and information, customers have a 24-7 access to important information on design, engineering, and logistics through TSMC-Online™. It also allows customers to create customized reports according to their management requirements to increase wafer management efficiency.

For design integration, TSMC-Online™ offers customers with comprehensive, accurate, and up-to-date information during the design stage to help customers quickly complete their product design; for engineering integration, TSMC offers information on wafers, yields, electrical analysis, quality, and reliability to help customers improve product performance; and for logistics, TSMC proactively delivers related information from order placement to delivery to ensure that customers can have real-time





knowledge of order status. To serve as a customer's "virtual fab", through TSMC-Online™, customers can manage comprehensive product manufacturing information on a real-time basis. TSMC offers transparent and comprehensive services for wafer fabrication to ensure that our customers achieve product success.

With the continuous increase in the types of advanced technologies, the design complexity is also constantly increasing. In 2020, TSMC collaborated with OIP alliance partners and cloud service providers to offer unlimited and comprehensive information security protection to customers. We also used cloud services to create a highly accessible design environment to help customers accelerate design to market and win business opportunities.

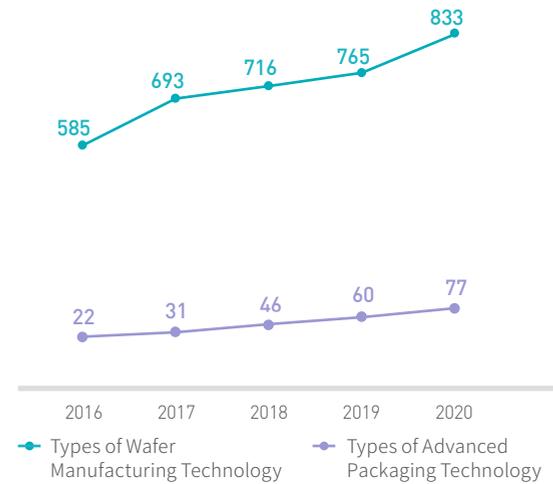
In 2020, in line with the technology roadmap, we provided customers with more than 830 types of wafer technologies and more than 70 types of advanced packaging technologies. For protecting proprietary customer information,, TSMC commits to ensuring the interest of all customers and to designing protection mechanisms that can satisfy customer needs. To help customers accelerate product certification, TSMC obtained ISO 15408 IT security certification for Fab 12B, Fab 15B, and Fab 14A in 2020, achieving the highest security standard for product safety and proprietary customer information protection, and is now ready to receive and fulfill orders for high-security products.

Under the pandemic, customers are not able to take international business trips. As a result, TSMC

is complying with security standards for proprietary information to build remote sharing platforms for different information security levels. TSMC has successfully completed 15 remote audits to support customer's product launching on schedule and win customer trust.

TSMC strongly believes that continuous innovation, highest-quality products and services are the key factors to maintain customer satisfaction. As a trusted technology and capacity provider in the global logic IC industry, TSMC will continue to be service-oriented and bring maximum benefits to our customers so that we become a long-term important partner that customers can trust and rely on for success.

Technology Types for Customers



Note: 2020 index includes Taiwan Facilities and Subsidiaries.

Case Study

Smart Technical File Navigation System

With an increasing number of technology types, TSMC-Online™ offers more than 12,000 technical files as of 2020. In the existing complex binary indexed tree, customers often get lost or make mistakes along the pathway. As the technology grows more complex and file sizes increase, it takes a longer time to download documents.

In 2020, TSMC's Customer Service Organization, Business Development Organization, and Corporate IT Organization worked together to revamp TSMC-Online™ data structure and launch a smart file navigation system to help customers access required technical files for new product designs faster. To ensure the system is robust at the time of launching, the Customer Service Organization and Business Development Organization have referred to user feedbacks and access how technical files

are used and categorized from the customer's perspective. We use a 2D matrix table to replace the existing binary indexed tree and strengthen filter and search functions. With support from the Corporate IT Organization, TSMC-Online™ is also open for cloud download services under the premise of information security.

With the new TSMC-Online™ data structure and smart file navigation system, customers will be shown a file map that helps them find any files easily; at the same time, cloud services will also significantly increase technical files download speed. The smart file navigation system is launched in stages beginning in March 2021. We predict that the system will effectively reduce the time that customers search for technical files by 70% and increase the download speed by three to ten times.

Before—
Scattered Category Tree

After—
Easier & Faster with Matrix Table

Reduce
70%
of time required to
search for technical files

Increase
3-10 x
in download speed



TSMC Delivers Unrivalled Manufacturing Flexibility

> 12.4M 2020 total managed capacity reached over 12.4M 12-inch wafer equivalents

