

Material Issue

Customer Service



Strategies

TSMC 2020/2025 Goals

Achievements & Targets

Customer's Virtual Fab

Provide complete and timely information to facilitate production success; enhance process and security mechanism to ensure customer information protection

- Align with TSMC technology development roadmap, available technologies through TSMC-Online to reach 370 2025
- Pass customer product information audit without major defect 2025

Listen and Respond to Customer Needs

Closely collaborate with customer and conduct meeting/questionnaire to understand and answer customer's questions, so that we can provide the best customer service

- "Customer Service" score in Quarterly Business Reviews to reach 75% with satisfactory feedback 2025

0

Pass customer product information audit without major defect



Target: Pass customer product information audit without major defect

- Pass customer product information audit without major defect
- Align with TSMC technology development roadmap, available technologies through TSMC-Online to reach 330

8.8

"Customer Service" score in Quarterly Business Reviews reaches 8.8 points



Target: Reach 8.8 points

- "Customer Service" score in Quarterly Business Reviews to reach 72% with satisfactory feedback

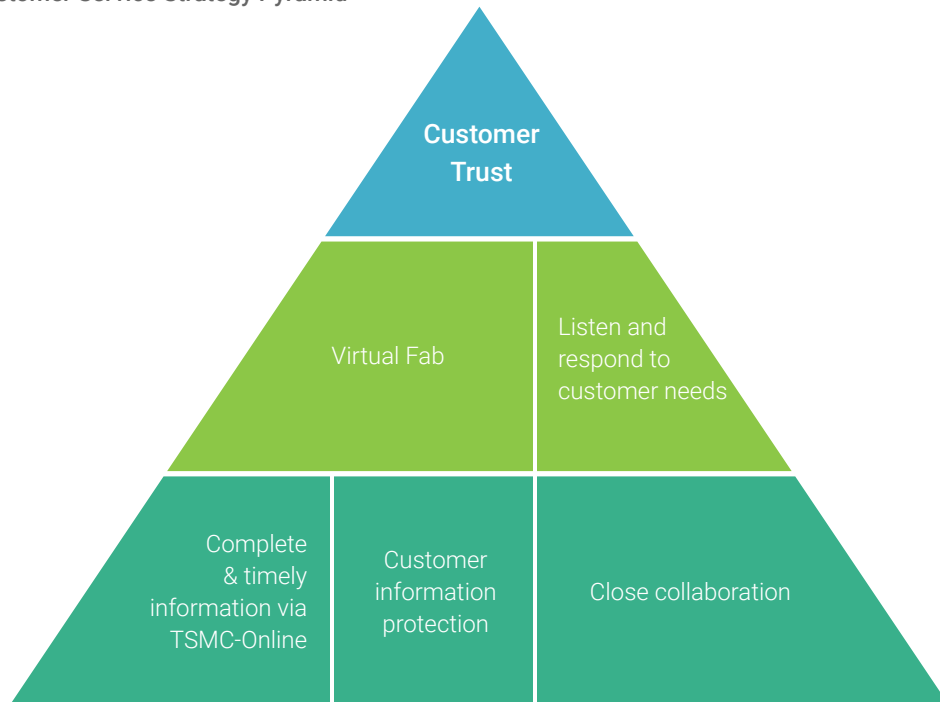


To provide the best service to customers, TSMC has a dedicated customer service team as the main contact window for coordination and facilitation. TSMC strives to provide world-class design support, mask making, wafer manufacturing, and backend services. TSMC also protects customers' confidential information with the highest standard. These are aimed at achieving an optimum experience for customers and enable customer success, so TSMC can be a reliable partner customers can trust.

Customer's Virtual Fab

Customer trust has always been a very important core value in TSMC, and it is also the reason why customers entrust their manufacturing service to TSMC. Real-time interactive information exchange and secure customer information protection are the key factors to win customer trust.

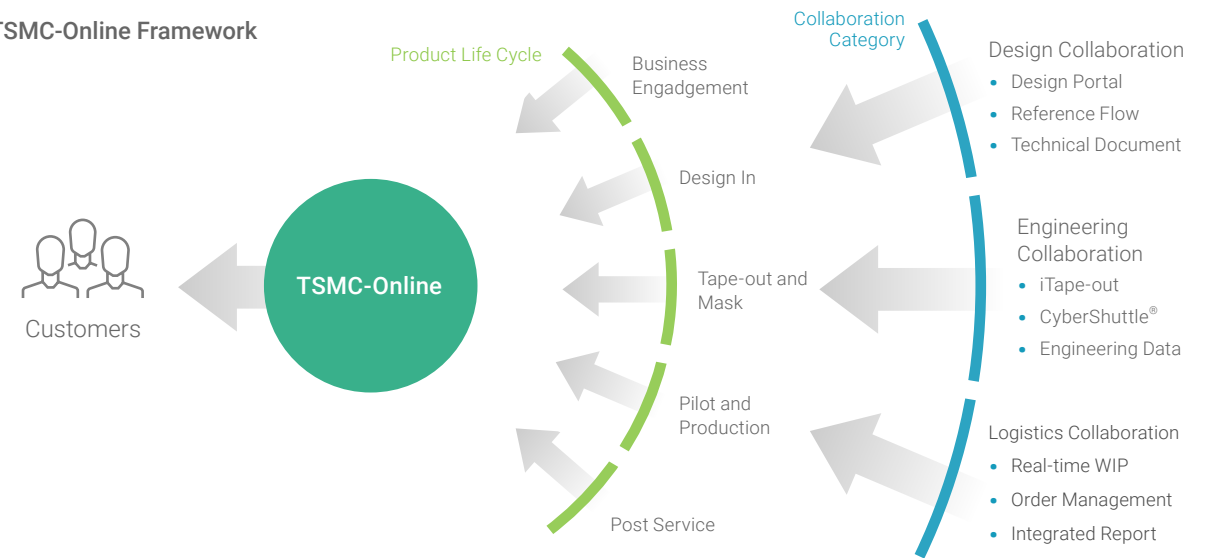
Customer Service Strategy Pyramid



Regarding the real-time interactive information exchange, TSMC has provided the web-based TSMC-Online system which offers customer integrated service for design, engineering and logistics. With this service, customers can have 24/7 access to the most critical information and customize their reports based on their unique requirements and management key index. Through TSMC-Online, TSMC has offered a transparent and complete semiconductor

manufacturing information system which serves as a customer's virtual fab. This enables customers to have real-time access and control over the entire production cycle with access to critical information to help them achieve product success. In 2017, TSMC offered a new "Customer Service Package" which allows customers to have fast and convenient access to the corresponding service function based on the product life cycle.

TSMC-Online Framework



2017 Highlights

| | | | |
|---|--|--|--|
| 300 Available technologies offering through TSMC-Online | 9,000 Available technology files through TSMC-Online | 100,000 Customer downloads of technology files through TSMC-Online | 400,000 TSMC-Online access times |
|---|--|--|--|



>90%

The annual customer satisfaction survey reached over 90% satisfaction for four consecutive years, demonstrating our good relationship with customers

Regarding customer information security, TSMC is committed to protect all customers' proprietary information. With the Virtual Fab architecture, TSMC has implemented special security controls throughout the customer's product lifecycle that are examined and refined every year. In 2017, TSMC enhanced customer information access with even more comprehensive control on TSMC-Online. Customers can only access TSMC-Online through pre-defined and verified security paths and are required to update passwords regularly, all aimed for eliminating any security risk. In 2017, TSMC passed all customer audits on product and information protection and specific security products, TSMC has supported customers to pass the ISO 15408 product security audit successfully. Besides, no customer complaints relating to information leakage. In 2018, TSMC plans to certify the security and information

protection related audit for specific Fab locations, to ensure the safe production of wafer manufacturing. We aim to pass all customer product and information protection audits each year, and continuously strengthen customer trust and partnership with TSMC.

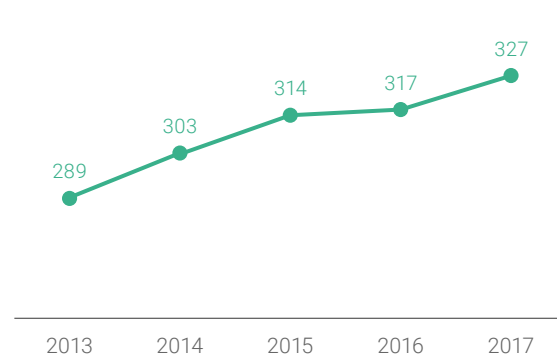
Listen and Respond to Customer Needs

To assess customer satisfaction and ensure that our customers' needs are appropriately understood, Quarterly Business Reviews (QBRs), which include technology, quality, yield, design support, customer relationship and customer service, are conducted by the customer service team so customers can give feedback to TSMC on a regular basis. Customer feedback is routinely reviewed and considered by executives and then developed into appropriate

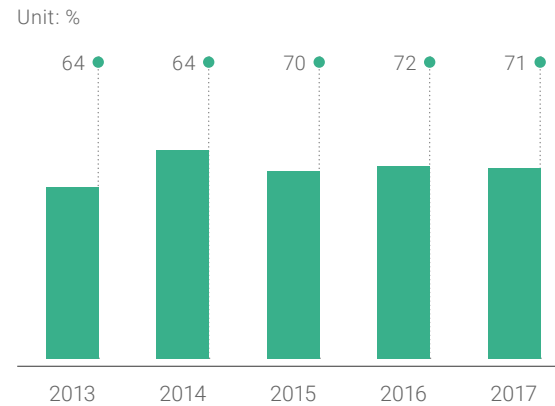
improvement plans, all-in-all becoming an integral part of the management process with a complete closed loop.

In 2017, "Customer Service" score in Quarterly Business Reviews with satisfactory feedback is 71%, with 1% loss as compared to 2016. The major reason for this minor decrease is due to the length of time it took for technology collaboration discussion and decision. In the future, TSMC will improve the communication process and enhance the collaboration information sharing in order to facilitate rapid decision making on projects, and move toward the 2025 goal of reaching 75% in customer service satisfaction.

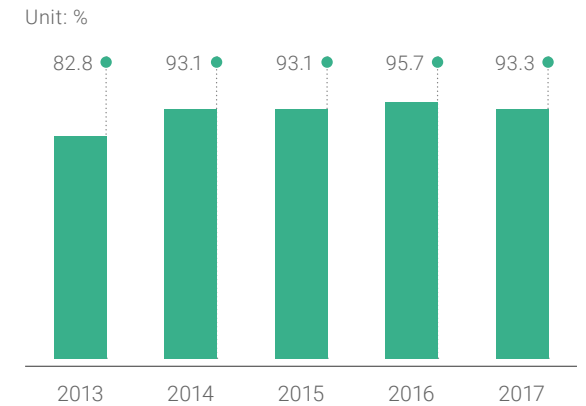
TSMC-Online Cumulated Technology Offerings (Exclude Already Sunset Folders)



Quarterly Business Review Customer Service Score



Annual Customer Satisfaction



TSMC also conducts the Annual Customer Satisfaction Survey (ACSS) with most active customers, either by web survey or interviews through an independent consultancy. The ACSS is divided into 3 categories: Behavioral, Image and Execution. TSMC uses customer survey data as a base to identify future focus areas for customer relationship development. Through surveys, feedback reviews and intensive interaction with customers, TSMC is able to maintain close contact for better service and collaboration. In the future, TSMC will continue to focus on technology leadership, manufacturing excellence and customer service to enable win-win partnerships with our customers.

TSMC believes that continuous innovation, high quality products, and superior customer service are critical to enhancing customer satisfaction, thereby retaining existing customers, attracting new customers, strengthening customer relationships, all leading to higher levels of retention and expansion. In 2017, TSMC manufactured 9,920 different products for 465 customers, deliver 10.5 million 12-inch equivalent wafers with an 8.8% year-over-year increase. In the global integrated semiconductor industry, TSMC will keep playing its role of the trusted technology and capacity provider and an important partner to customer success.

Proprietary Information Protection

Proprietary Information Protection is a promise from TSMC to customers, shareholders and employees. TSMC responds to the increasing importance of proprietary information protection in regard to maintaining current and future competitive advantage, and devises "Proprietary Information Protection – PIP" policy to define the proprietary information protection and management guidelines. TSMC trade secrets and related undisclosed confidential information are protected under these guidelines in the best interest

of company, shareholders, employees, customers, and vendors. TSMC PIP strategy is based on Plan-Do-Check-Act, PDCA management, which continuously upgrades the information protection mechanisms, raises PIP awareness in employees, and mitigates the risk of information disclosure.

TSMC promotes PIP programs continuously, including annual PIP training classes and several promotion channels, not only to employees but also to

2017 Proprietary Information Protection Accomplishment



Continue on next page



Tasks of 2018

Integrate front-end wafer and back-end package related design documentation in TSMC-Online, to provide one-stop shopping service

Enhance TSMC-Online usage rates in functions of self-customizing production report and "Customer Lot-Handling"

Upgrade system hardware for TSMC-Online information security

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vendors. In 2017, TSMC further enhanced vendor information access and badge control, in addition to promoting PIP in annual vendor meetings. TSMC ensures proprietary information protection by forming an alliance with vendors.

5 Customer Security Audits

Passed 5 customer security audits and certifications, ensured product information protection during manufacturing

100%

Over 3,000 newcomers completed Proprietary Information Protection training course

100%

Over 10,000 new vendors completed 153 Proprietary Information Protection training courses

2017 Proprietary Information Protection Enforcement Status

8 Promotion Micro Films

8 PIP micro films to deliver PIP major concepts

12 Regulations

Newly created or revised 12 Proprietary Information Protection regulations



24 Promotion Posters

24 PIP promotion posters to raise PIP awareness

1.2%

Employee PIP violation rate: 1.2%

Main cause: individual negligence or fail to comply with PIP procedures

Corrective actions:

- Reinforce PIP promotions and training by multiple channels
- Information access control for resigned employees
- Document printing and information access control enhancement.

94 Points

94 points average score for employees PIP engagement

- Conducted PIP engagement survey, collected over 42,000 surveys and over 91% response rate. Survey results show significant PIP engagement with 94 points

45,000 Employees

Over 45,000 employees completed Proprietary Information Protection annual refresh e-learning course

Course content:

- PIP policy and core concepts
- PIP milestones and new regulations in 2017
- PIP violation case studies and reminders
- PIP information channels

3M Checks

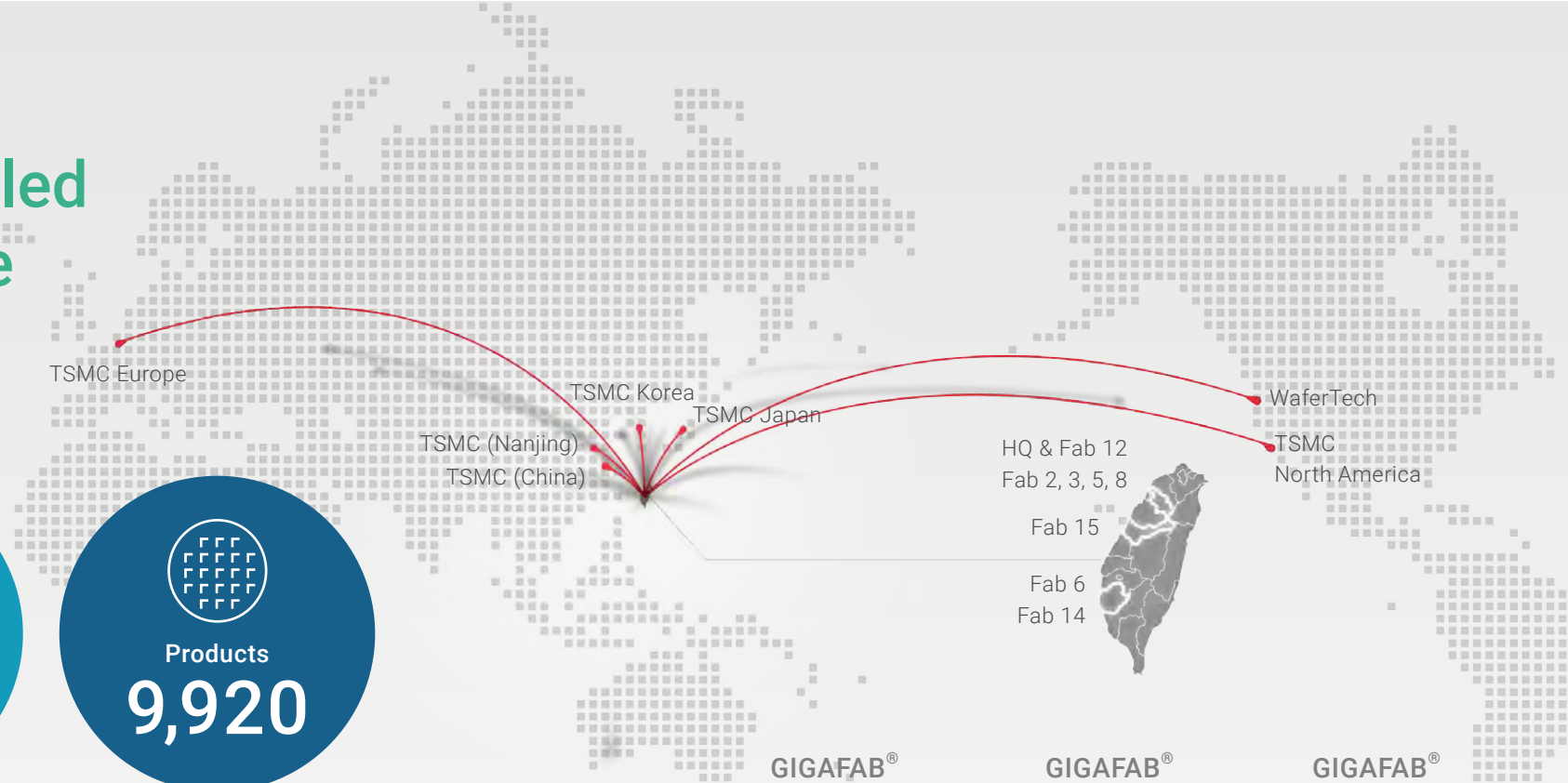
3 million PIP checks conducted per month, including:

- PIP prohibited item inspection
- Physical access compliance check
- Proprietary information handling
- E-mail handling
- Vendor PIP compliance check



TSMC Delivers Unrivalled Manufacturing Service

2017 total wafer shipments increased 8.8 percent from 2016 to reach 10.5 million 12-inch equivalent.



Technologies
258

Customers
465

Products
9,920



Fab 2
• 32
• 82
• 1,203



Fab 3
• 67
• 162
• 1,377



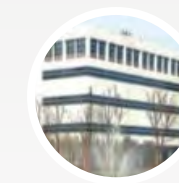
Fab 5
• 21
• 38
• 260



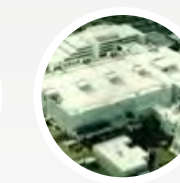
Fab 6
• 54
• 134
• 702



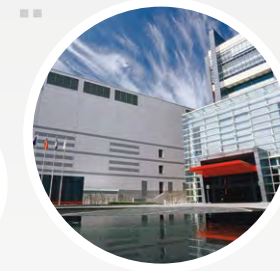
Fab 8
• 49
• 166
• 1,687



TSMC (China)
• 44
• 133
• 813



WaferTech
• 23
• 39
• 478



HQ & Fab 12
• 68
• 123
• 1,053



Fab 14
• 65
• 168
• 1,657



Fab 15
• 14
• 93
• 838