Customer Satisfaction



The Oki Group is dedicated to developing and providing products and services that ensure continued customer satisfaction, in full consideration of safety and ease of use.

The Oki Way

The Oki Group will always approach its business activities from the perspectives of consumers and markets. The goal of the Oki Group is to supply useful products and services that provide solutions and bring satisfaction to users. Business activities that help customers to use products safely and satisfactorily are to be the first priority for the Oki Group.

Quality Management

Quality Management and Quality Assurance System

Oki's quality philosophy calls for the consistent supply of products and services that bring satisfaction to users. Oki puts this philosophy into practice by applying extensive and effective quality management and quality assurance at all stages of its activities, from product planning through to maintenance and services.

Organizational units established by Oki to drive its qualityrelated activities include a Quality Coordination Department within its corporate division (head office division), as well as quality assurance departments within each in-house company and Oki Group company. This structure allows Oki to respond promptly to a wide range of user needs.

Oki has gained ISO9000-series quality management certification for many of its sites, including those of Oki Group companies.

Oki Group Companies with ISO9001 Certification

Oki Electric Industry Co., Ltd., Oki Data Corporation, Oki Customer Adtech Co., Ltd., Shizuoka Oki Electric Co., Ltd, Oki Communication Systems Co., Ltd., Oki Printed Circuits Co., Ltd., Oki Sensor Device Corp., Oki Erfolg Co., Ltd., Oki Electric Cable Co., Ltd., Oki Wintech Co., Ltd., Oki Engineering Co., Ltd., Oki Software Co., Ltd., Nagano Oki Electric Co., Ltd., OKICOMTEC Ltd., Oki Telecommunication Systems Co., Ltd., Miyazaki Oki Electric Co., Ltd., Miyagi Oki Electric Co., Ltd, Tama Oki Electric Co., Ltd., Oki Micro Design Co., Ltd., Oki Technocollage Inc., Oki Logistics Co., Ltd., Oki (Thailand) Co., Ltd., Oki Data Manufacturing (Thailand) Co., Ltd., Oki (UK) Ltd., Oki Systems (UK) Ltd.

System Design Inspection by Skilled Technicians

To achieve the standard of quality expected by users of its telecommunications systems and other system products, Oki emphasizes careful evaluation of key technical elements and technology risks during the upstream phase of product development. With the expansion of external procurement of products in recent years, it has also become increasingly important for development technicians to become proficient quickly in the appropriate selection and use of those products.

Oki has established a Design Inspection Department to meet these needs. Its task is to carry out technical inspections to ensure that design technology is appropriate from the perspectives of system composition, availability, expandability, performance targets, operational management and security. The scope of its inspections also includes system construction and test planning.

Veteran technicians are assigned to the Design Inspection Department. They use their accumulated technical knowledge and expertise to inspect products objectively and detect and prevent any problems. This inspection process is also used to train young technicians by passing on technology and knowledge.

Quality Checks for Purchasing

Growth in the volume of purchased products has increased the importance of effective quality assurance. Oki ensures and improves quality through quality management of key parts appropriate to supply capacity. This is achieved by certifying suppliers' factories and checking quality on each process. Appropriate quality checking methods depend on the characteristics of each purchased product and its intended use.

• Typical Quality Check Flowchart for Products Purchased from a Supplier



Ensuring Product Safety

Oki's corporate policy on product safety is to give priority to business activities leading to the creation of safe products that will ensure user satisfaction. Particular emphasis is placed on product liability (PL), and every possible step is taken to prevent problems that could endanger human life or safety, or damage property.

Safety design plays a vital role in Oki's approach to product

liability issues. Starting at the design stage, engineers identify and eliminate all foreseeable hazards. More specifically, measures to remove potential hazard are developed according to the seriousness and incidence of the phenomena causing each problem. If a hazard cannot be eliminated, warnings will be displayed on the product itself, in the instruction manual, and in advertising materials.

Oki is determined to respond appropriately and promptly in the unlikely event of serious complaints or quality issues. It strictly enforces rules for dealing with serious complaints and information about major quality issues. Under those rules, complainants receive a full explanation of the causes of problems and steps are taken to remedy them. This emphasis on the disclosure of information to customers is an important aspect of Oki's approach in this area.

Responding to Customer Feedback

Configuring ATMs for New Banknotes

In November 2004 Japan updated its paper currency for the first time in 20 years. With a market share of over 40%, Oki is Japan's leading manufacturer of automated teller machines (ATMs). Recognizing that it has an important social responsibility to users of ATMs and integrated cash management systems, the entire Oki Group is working to develop machines capable of handling the new banknotes, and to complete modifications to existing machines.

To facilitate the transition to ATMs configured for the new banknotes, Oki conducted five rehearsals in the period leading up to the changeover date. After the introduction of the new banknotes, Oki continued to provide support for one month through Oki Customer Adtech Co., Ltd. and its nationwide network of 300 offices. As a result of these measures, the transition was completed on the approximately 70,000 machines involved without any major problems.

Universal Design

In 1991, Oki established the Ergonomics Committee as an organizational structure spanning multiple corporate units. The committee's membership is made up of workers from organizational units closely involved in Universal Design, including research, design and development departments. Its task is to deliberate on Oki's response to trends in international standards and Japan Industrial Standard (JIS) relating to usability and accessibility, to formulate common internal standards, and to provide support for the application of those standards to individual products.

Maintenance and Services—Enhancing Customer Support

Oki Customer Adtech Co., Ltd. is responsible for the maintenance and service operations of the Oki Group. In April 2004, it enhanced its "One-stop Service" system under which inquiries about both hardware and software receive an integrated response from customer engineers (CEs). To provide this service, seven senior technicians with extensive knowledge of manufacturing operations were assigned to the company's Customer Support Center, which handles calls from customers experiencing problems with equipment.



Safety design

Hazard analysis

Actions dependent on seriousness and incidence of hazards

Hazard information in user manuals

Warnings in advertising materials

ss and ind

ence of hazards

Action 4

Action 3

this database, CEs can quickly identify the causes of problems and provide appropriate advice to customers. As a result of this approach, the percentage of problems resolved through telephone support increased from 14% in the year ended March 2004 to 28% in the year ended March 2005.

*FAQ: Frequently Asked Questions

Safety Design Flowchart

Action 1

Analysis of se

Action 2



To provide products and services that will bring satisfaction to users, it is vital that Oki checks customer satisfaction directly and reflects the results in new products and services, and in its systems.

Established in February 2005, the Oki Direct Marketing Center promptly identifies customer needs and issues through ongoing communications with customers. Based on this information, the Center works on a timely basis with sales, maintenance and development divisions to improve customer satisfaction levels.



Creation of Direct Marketing Center

Direct Marketing Center



Customer Satisfaction

Products Contributing to Society

The Oki Group's corporate mission statement is "the people of Oki, true to the company's enterprising spirit, are committed to creating superior network solutions and providing excellent information and communications services globally to meet the diversified needs of communities worldwide in the information age." This mission is reflected in Oki's determination to supply products and services that truly benefit users and contribute to society. Oki also contributes directly to peace of mind by supplying numerous products and services to meet needs in such areas as network security and disaster prevention.

Improving Security

Iris Recognition System

The increase of various fraudulent and illegal activities by the Internet and other networking technology has had a major impact on society. Identity authentication using biometric technology is seen as the solution to this problem. There is particularly intense interest in the use of personal authentication



systems based on iris recognition, an extremely precise technology with an error rate of just 1 in 1.2

million. Oki was among the first to begin development of iris recognition technology. By using an automatic capturing system, it has been able to provide extremely practical and easy-to-use systems for a wide range of applications.

These systems enable the prevention of illegal activities and identity fraud in many situations, including access control for high-security areas, airport security, and kiosk terminals. They can also provide higher security than traditional authorization methods, such as password entry, in situations that involve logging onto computers or verifying authority to access network resources.

• E-Split Delivery – Software to Prevent Leaks of Information E-Split Delivery information leakage prevention software prevents information leaks during delivery by using file splitting technology to divide important information into sections, which are then encrypted and forwarded by different routes.

If media containing personal information or other important data are lost or stolen during transportation, a leak is deemed to have occurred even if the information is encrypted. With E-Split Delivery, files are split after the original data have been encrypted, and decryption is not possible until all of the necessary data sections have been reintegrated. For example, data might be divided into two sections, with one section sent on CD-ROM or other media, and the second by e-mail. The data will not be valid until both sections have been brought back

E-Split Delivery Prevents Information Leaks during Delivery



together. This approach provides total protection against information leaks during delivery.

ProtecPaper—Software to Prevent Leaks of Information Printed documents account for an estimated one-half of all information leaks. Leaks can be prevented by prohibiting unauthorized print or copy of documents, but this approach may not be practical because of operational requirements and costs.

ProtecPaper prints digitally watermarked documents with micro dot patterns, such as the name of the person who printed the document, and the date and time of printing. This can be used to identify the source of a leak. These dot patterns are not distracting for readers as they appear light and uniform background patterns on the printed documents, so that the watermarked digital information can still be recovered even if pages are folded over or cut away. ProtecPaper helps to prevent information leakage and to safeguard privacy of personal information against leaks, since document source information can be read directly only by analyzing the pattern with special software and a scanner.

ProtecPaper Prevents Information Leaks Resulting from the Unauthorized Removal of Documents

Person authorized to Print the document Embedded pattern containing source information (name of person who printed the document, name of computer, etc.)	OOOO Prince Image: Description The delete	Printed pattern in the background of the body text The pattern and the text cannot be deleted separately	
	出所情報出業		Prevention of unauthorized document removal
	Even if a doc is leaked	orized remova Display informa source i read from	removal or theft , Display of source information source information can be read from the document itself
			This allows the source of the leak to be identified

Establishing Disaster Prevention Schemes

Municipal Disaster Management Radio Systems Local governments in Japan have been establishing disaster management radio systems since 1978. Oki has been involved in the creation of numerous such systems since the outset.

These systems can communicate disaster information to large numbers of residents simultaneously via outdoor loudspeakers and receivers in many residents' homes. They are also more disaster-resistant than other means of communication, such as telephone lines. Digital technology was introduced in the year ended March 2002, and it is now possible to send text information and monitor conditions in danger zones

by means of images. The reliability of information has been improved, and it is also possible to provide information to people with hearing problems, which was difficult in the past. In addition to their emergency use, these systems can also be used as a tool for local government communications, including the distribution of official

notices.



Communications Control Console

• Fire Fighting Command and Control Systems Oki's fire fighting command and control systems integrate a range of services, including reception of calls to the 119 fire emergency line, recognition of fire notifications, automatic selection of fire fighting vehicles, issuance of dispatch orders, and coordination of tactical support at the fire scene.

The scope of duties performed by fire services has expanded to include not only fire fighting, ambulance services, rescue operations and response to natural disasters, but also crisis management activities in response to major earthquakes, terrorist incidents and other contingencies. To achieve these goals, fire fighting systems need to strengthen their information-gathering capabilities, and to improve their operational capacity to issue directives accurately and guickly.

Oki's fire fighting command and control systems meet the three basic principles of fire fighting communications— promptness, accuracy and reliability—by providing enhanced ease of operation, reliability and safety. For example, command and control functions can be performed from any console, while support information capabilities have been enhanced through the use of IT.



A fire fighting command and control system

Enhancing Customer Satisfaction

• "Voice of Customer Navigation" Solutions Voice of Customer Navigation solutions use IP telephony technology to store and manage customer comments received via telephone, sales offices, the Internet or other methods in an integrated database. Accurate information can then be reflected appropriately in business strategies.

For example, when a telephone call from a customer is received at a center and transferred to a sales office, the content of the conversation and information about the customer are forwarded at the same time under strict security. This allows the staff member concerned to take over the matter promptly and accurately, and to avoid problems caused by inadequate explanations. The system can also automatically detect leading statements, inappropriate language and other problems and

• Voice of Customer Navigation Solutions



issue warnings. Another feature is the ability to detect specific keywords automatically and display product information and response procedures. This system enhances customer satisfaction by efficiently gathering and utilizing a variety of customer comments. It also supports sales activities with the emphasis on compliance.

IP Interphone System

In April 2005, Oki supplied an IP interphone system to Nagoya Railroad Co., Ltd.

Nearly half of the railroad stations in Japan are unattended, and the number is expected to increase because of Japan's falling birthrate and aging population. Nagoya Railroad Co., Ltd. had installed an interphone system to



IP interphone

respond to inquiries from customers using automatic ticketing machines in unattended stations. However, the quality of sound deteriorated in proportion to the distance between the station and the facility where calls were received, and users were unable to hear properly. Other problems included the fact that interphones at other stations could not be used while a call was in progress, and the time was required to repair the system when faults occurred.

Because Oki's IP interphone system uses voice over internet protocol (VoIP) and network technology, it is able to transmit sound clearly, and multiple calls can be handled at the same time. The system also enables remote monitoring, and faults can be resolved easily. Nagoya Railroad has improved customer services by installing this system on platforms as well as in ticketing machine corners.

Satisfaction for All

ITS Solution

Oki began to develop road transport systems in the 1980s. Since the 1990s it has supplied a variety of systems used to build intelligent transportation systems (ITS), such as vehicle information and communications systems (VICS) and electronic toll collection (ETC) systems.

Oki continues to develop leading-edge technologies that are helping to enhance the safety and comfort of the transportation environment. For example, in February 2004 it developed a system capable of transmitting video images between vehicles using dedicated short-range communications (DSRC), which is a wireless technology used exclusively for ITS.

ITS technology is now entering its second stage of evolution. Oki will continue to develop products that benefit today's highly mobile society.



ETC lane