Risk management

As the environment surrounding the company becomes more complex and diverse, the Ricoh Group positions risk management as essential to controlling internal and external uncertainties relating to its business and in implementing management strategies and achieving business objectives. The Company accordingly launched the Risk Management Committee to oversee such efforts.

Meeting for Strengthening Groupwide Collaborative Risk Management

Regular meetings will be held to strengthen collaboration among the various divisions and business units throughout the Ricoh Group and to increase the effectiveness of risk management at each division of Ricoh and each Group company. The chairperson of the risk management committee will set up these regular meetings, and risk management promoters who are appointed by the head of each business unit will attend them. The main objectives of these meetings are as follows.

1. Sharing information to determine focus managerial risks for the entire Ricoh Group and promoting and developing risk awareness in each business unit.
2. Gathering information about important risks identified in each business unit (each division of Ricoh and each Group company) and reflecting them in focus managerial risks for the entire Ricoh Group.
3. Information sharing and implementation of interactive opinion exchanges, regarding the promotion of risk management.

Responding to incidents and accidents

Setting down the Ricoh Group Incident Management Standard for all affiliate companies in Japan and overseas and based on the president’s policies, the Ricoh Group has created a system to deal with incidents that may have a negative impact on corporate business activities and to prevent reoccurrence. Serious incidents are to be reported from the division in which the incident occurred through the management division primarily responsible for each incident, to the Ricoh President, the Internal Control Directors, a unit that oversees disclosure, officers connected to the case, and Audit and Supervisory Board Members. A summary of serious incidents that have occurred during the most recent six months, together with a description of how they were dealt with and the measures taken to prevent reoccurrence, as well as changes in the numbers of occurrences classified by incident, are reported to the GMC and Board of Directors every six months. The GMC reviews management risks for the next year in light of these reports and incident frequency.

Among the reported incidents, the number of compliance-related serious incidents (corresponding to GRI G4 SOS (a)) in the past three years were 19 in the year ended March 31, 2017, 27 in the year ended March 31, 2018, and 33 in the year ended March 31, 2019.

Of these compliance-related serious incidents, there was one major incident that required disclosures to external organizations in the year ended March 31, 2016, which was an accounting violation that occurred in India. However, there was no major incident in the year ended March 31, 2017. We have disclosed information through our website and other channels about accounting irregularities at Ricoh India.

To date, we have reinforced the operational management of subsidiaries, assessed the fitness of external auditors, enhanced the effectiveness of internal audits, bolstered global collaboration between internal auditing units, and have stepped up compliance training. We will continue to roll out measures to prevent a recurrence of such irregularities and strengthen governance in the Group.

Business continuity plan

The Ricoh Group has created a business continuity plan (BCP) to enable the business to quickly recover and continue and to minimize the degree of damage in the event of an unexpected disaster or accident.

In addition to the BCP itself, measures are in place throughout the Ricoh Group to facilitate responses within the scope of business continuity management (BCM), covering implementation, application, education, training, correction and revision of prevailing BCPs, which include the current BCP implemented throughout the Group to ensure a common response to new strains of influenza and widespread natural disasters in Japan.
### Risk management

**Business risks and countermeasures**

In the year ending March 31, 2020, we set up a groupwide risk management structure system and established priority areas in which to reinforce countermeasures. The global economic and business climates are constantly changing. Some risks accordingly necessitate timely responses. So, not all of the risks greatly affecting business performance, listed in the table below, are priority areas for Group risk management. We have presented priority area risk items and descriptions below. We have also recorded the impacts on operating results and other areas of risks materializing and our countermeasures.

The forward-looking statements in the text were based on the Group’s judgment as of end of the year ended March 31, 2019.

### Risks that have a large impact on performance

<table>
<thead>
<tr>
<th>Risk category</th>
<th>Risks</th>
<th>Description of risks</th>
<th>Countermeasures for risks</th>
<th>Growth strategy effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Business environment</td>
<td>Economic situation in major markets</td>
<td>The Ricoh Group develops business globally, and the economic conditions of its major markets, Japan, the United States, and Europe, affect its business. In particular, - Sino-American trade friction - Brexit</td>
<td>The Ricoh Group carefully monitors changes in the global economic situation and takes measures to respond appropriately. - With regard to Sino-American trade friction, we are promoting measures to reduce customs risk, such as transferring some product production for the United States from China to a factory in Thailand, using the conventional BCP measures (parallel production). As a result, we will be able to prevent the impact on business performance that is expected to be several billion yen in response to the decree on the fourth phase of sanctions and customs measures against China. We will continue to respond to changes in the situation.</td>
<td>Mainly Growth Strategy #0</td>
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<td>More competitive markets</td>
<td>The Ricoh Group continually faces the risk of fierce competition. Below are considered as risks. - Competitive new products by competitors. - Increased price competition - Shift in demand to low-priced products</td>
<td>The Ricoh Group plans to continuously introduce new products that enhance customer value in each business area. The Group will always aim to gain competitive advantage by high-quality, high-value-added products that can improve customer workflows from value provision by hardware. With regard to price competition, we will continue to conduct appropriate selling price management. By freeing ourselves from scale expansion competition and providing high-quality, high-value products that go into workflow solutions, we will aim to get customer satisfaction without lowering selling prices.</td>
<td>Growth Strategy #0, Growth Strategy #1, Growth Strategy #2</td>
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<td></td>
<td>Fluctuations in the price of parts, materials and/or foreign currency exchange rate</td>
<td>A substantial portion of the Ricoh Group's manufacturing and sales activity is conducted outside of Japan, including in the United States, Europe, and in Other region, such as China. Below are considered as risks. - Direct impact of material market fluctuations - The impact of exchange rate fluctuations on consolidated statement of profit or loss and consolidated statement of comprehensive income as a result of converting local business results of overseas subsidiaries into yen using the average rate for each year. - The impact of exchange rate fluctuations on consolidated statement of financial position due to the fact that assets and liabilities denominated in local currency are converted into yen using the exchange rate as of each account closing date.</td>
<td>In order to respond flexibly to fluctuations in the material market, the Ricoh Group promotes the study of alternative materials during product development and after shifting to mass production, promotes multiple purchasing in procurement of materials, and regarding market fluctuations that cannot be absorbed, the Group is striving to reflect selling prices appropriately while looking at competitors’ situation.</td>
<td>Growth Strategy #0, Growth Strategy #1, Growth Strategy #2</td>
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</table>
### 1. Business environment

<table>
<thead>
<tr>
<th><strong>Alliances with other entities, strategic investment</strong></th>
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<tr>
<td><strong>Risks</strong></td>
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<tr>
<td>The Ricoh Group engages in alliances with entities to create various products and services to fulfill customer demand. The Group believes that alliances with other entities, joint ventures and strategic investment are effective for the timely development of new technology and products using management resources of both parties. However due to various reasons described below, these alliances may adversely affect the Group’s future growth and profitability as well as its financial results and condition.</td>
</tr>
</tbody>
</table>
| - The Group’s interest differs from other parties’ interests due to financial or other reasons, so the Group may be unable to maintain the alliance.  
- Failure to acquire an exact interest due to lack of information and enough deliberation.  
- Such strategic investments may not necessarily lead to the expected outcome or performance and may result in increased time and expenses being incurred due to the integration of businesses, technologies, products and personnel necessitated by such investments. | In order to flexibly respond to various customer demand, the Ricoh Group believes that these types of management decisions are more significant on the future performance of the Group. That is why the Group sets this risk as “managerial strategic risk” and makes efforts to strengthen decision making process for this matter. The Investment Committee is established and positioned as an advisory committee to the GMC, and verifies investment plans based on the validity of financial aspects including capital costs, and strategic aspects such as profitability and growth risks, etc. Members with expertise perform prior reviews and discussion on diversifying investment projects to external entities in order to ensure consistency with management strategies and raise the efficacy of the investment while improving the speed and accuracy of investment decisions. The committee chairperson attends and shares the results of the committee's discussions on each project in GMC so as to assist the decision-maker in making objective decisions. Also, the committee monitors each project's progress and learns from it so that continuous PDCA process runs effectively. |

### Ability to respond to rapid technological changes

<table>
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<tr>
<th><strong>Ability to appropriately respond to rapid technological changes</strong></th>
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<tr>
<td><strong>Risks</strong></td>
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<tr>
<td>The Ricoh Group believes that in order to maintain mid- to long-term competitiveness, securing and retaining highly skilled personnel at the right time is essential. The Group’s failure to respond to any risks described below, may adversely affect the Group’s future growth and profitability as well as its financial results and condition.</td>
</tr>
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</table>
| - Prediction to technological changes and actions for it  
- Set focus technological development area and resource allocation for it  
- Set new business area and technological development for it | With advancements in innovation across all sectors globally, it is becoming increasingly important to develop technologies that are able to resolve issues facing customers and society at large quickly. That is why the Ricoh Group sets this risk as “managerial strategic risk” and makes efforts to strengthen decision making process for this matter. The Group promotes and services to customers in a global market. To accomplish this, the Group runs research facilities in Japan, the United States, India and China, promoting deep collaboration among our facilities worldwide, while utilizing regional characteristics. In order to respond to the rapid business environment changes in timely fashion, it is not always best to conduct R&D activities internally. The Group promotes open innovation to accelerate R&D activities by proactively cooperating with universities, institutes and companies around the world. The Group’s established “Innovation Division” in 2019, and is integrating all new-growth-area related processes (such as prioritization, incubation, operationalization as a business). Also, the Group has assigned a CTO (Chief Technology Officer) to decide technological prior development areas, and proper resource allocations so that accelerate the Group’s technological activities. |

### Securing and retaining skilled personnel

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<tr>
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<td>The Ricoh Group believes that in order to maintain mid- to long-term competitiveness, securing and retaining highly skilled personnel at the right time is essential. The Group’s failure to respond to any risks described below, may adversely affect the Group’s future growth and profitability as well as its financial results and condition.</td>
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</table>
| - Failure to recruit qualified personnel in appropriate timing  
- Failure to train up highly skilled personnel  
- The loss of key employees | A reduced workforce due to a declining birthrate and an aging population is leading to a war for talent in critical areas such as AI, IoT and big data. That is why we set this risk as “managerial strategic risk” and place emphasis on securing and retaining qualified personnel. Deploying job-matching recruiting and ensuring highly trained person to get the career that they expect. Promoting not only fresh graduate recruiting but mid-career recruiting. Enhancing various systems in order to support work-life management and diverse workforce. Enhancing systems to secure and train managing staff. |

### Finance business

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<th><strong>Countermeasures for risks</strong></th>
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<tr>
<td>The Ricoh Group provides financing to some of its customers in connection with its equipment sales and leases.</td>
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<td>- Despite the Group monitor the creditworthiness and the amount of credit, no assurances can be made that the Group will be able to fully collect on such extensions of credit due to unforeseeable defaults by its customers. These financing arrangements that the Group enters into with its customers result in long-term receivables bearing a fixed rate of interest. The Group finances a part of these financing arrangements with short-term borrowings. As a result, there is a risk that operating profit may be affected by interest rate fluctuations. The Group develops its business based on the current law, tax and accounting regulations. If these regulations are changed significantly, there is a risk of affecting the performance of the Group. In terms of accounting standard, the adoption of IFRS 16 “Lease” is expected to have some impacts on the finance business, such as changes in customers’ purchasing behavior in countries to which the standard is applied.</td>
<td>The Ricoh Group evaluates the creditworthiness and the amount of credit extended to a customer prior to the financing arrangement and during the financing term on a regular basis. Depending on such evaluations, the Group makes adjustments to such extensions of credit as it deems necessary to minimize any potential risks of concentrating credit risk or nonpayment. The Group finances these financing arrangements with short-term borrowings subject to variable interest rates along with borrowings subject to fixed interest rates, whose terms are matched with the term of the financing arrangements for the purpose of hedging the interest rate risk.</td>
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</table>
### Risk management

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<tr>
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</table>
| 2. Business operation | Information security | When building information security systems, the Ricoh Group plans for these risks described below;  
- Malicious cyber-attack cause the Group’s system trouble, information security problem and loss.  
- Cyber-attack makes the Group an attacker-side, and the Group server is used for bad ends involuntarily. That results the Group’s bad reputation and the Group will be excluded from customer supply chain.  
- The Group products has big information security problem and get exclusion from market, which adversely affect the Group’s future growth and profitability as well as its financial results and condition. | Now is the time that each country demands country-level countermeasure for information security, the Ricoh Group watches new threat/movement carefully and consider/promote proper countermeasure for it.  
- Based on international information security standard, the Group establishes comprehensive control organization accordingly for covering the Group global information security and it enhances its systems continuously.  
- The Group makes countermeasures for risks which occur to factory/equipment systems to be cyber-attacked. | Growth Strategy #0  
Growth Strategy #1  
Growth Strategy #2 |
| | Product liability | The Ricoh Group may be held responsible for any defects that occur with respect to its products and services. Depending on the defect described below, the Group may be liable for significant damages which may adversely affect its financial results and condition.  
- Significant product liability (Burnout, Human damage)  
- Violation for safety/environmental regulations  
- Prolongation for quality problem in market etc.  
In addition, negative publicity concerning these defects could make it more difficult for the Group to attract and maintain customers to purchase the Group products and services. As a result, the Group’s financial results and condition may be adversely affected. | For enhancing safety/reliability of products, the Ricoh Group analyzes mechanism of each breakdown/incident carefully, and reflect it in products development process. If any problems happen in the market, the Group has systems to respond it promptly. In order to provide products aligned with each country’s safety/environmental regulations correctly, the Group reviews own operational standard/guide with confirming each local market update. | Growth Strategy #0  
Growth Strategy #1  
Growth Strategy #2 |
| | Long-term delay/suspension in supply of products | If the Ricoh Group faces to earthquake, Tsunami, political turmoil, flood, pandemic or supply-chain disruption, which causes risks described below.  
- Delay or disruption of parts supply  
- Stop manufacturing for products  
- Disruption of transportation, freight  
These risks may cause opportunity loss and adversely affect the Group’s financial results and condition. | The Ricoh Group keeps some amount of inventory for BCP, also has multi-supply route for key parts as preparations for accidents. Based on each risk-case assumption, the Group plans actions when it happens and does training, also evaluates effectiveness and improves its process. | Mainly |
| | Protection of intellectual property rights | Since alliance/joint-R&D with other parties are getting increased, the Ricoh Group may be involved in contract conflict/trouble, which may adversely affect the Group’s financial results and condition. | The Ricoh Group has accumulated learnings from trouble what the Group experienced in the past, then developed assessment method. The method is utilized for risk assessment for new business development and take measures based on that assessment results. | Growth Strategy #0  
Growth Strategy #1  
Growth Strategy #2 |
| | Responding to government regulations (including environmental regulations) | The Ricoh Group is subject to various governmental regulations and approval procedures in the countries in which it operates. If the Group is unable to comply with any of these regulations described below or fails to obtain the requisite approvals, the Group’s activities in such countries may be restricted. In addition, even if the Group is able to comply with these regulations, compliance can result in increased costs. In either event, the Group’s financial results and condition may be adversely affected.  
- Human resource related compliance (Harassment, Employment, Human rights, etc)  
- Export regulations and tariffs as well as rules which may constrain production/sales activities  
- Regulations relating to commerce, antitrust, patent, consumer and business taxation  
- Environmental and recycling related laws.  
The Ricoh Group has defined “Ricoh Business Conduct Guideline” to heighten awareness of the importance of corporate social responsibility through implementing “Ricoh Way.” The Group involves its employees in various activities designed to ensure compliance with applicable regulations as part of its overall risk management and compliance program.  
- Regarding Human Resources related  
Implement timely internal training and define emergency response framework, supplier periodic assessment for human rights compliance  
- Regarding export regulations  
Implement timely internal training, announce all the Group business related regulations change or update  
- Regulations relating to commerce, antitrust, etc.  
Legal division leads internal training and strengthens systems continuously with considering a case if any violation happens.  
- Regarding environmental and recycling related laws, the Group has introduced environmental management system and does periodic assessment to ensure environmental laws compliance. | | Growth Strategy #0  
Growth Strategy #1  
Growth Strategy #2 |
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</tr>
</thead>
<tbody>
<tr>
<td>3. Accounting system</td>
<td>Impairment of goodwill and fixed assets</td>
<td>The Ricoh Group recognizes goodwill in relation to acquisitions and various tangible assets or intangible assets for business operation. There might be harmful effects on business results or financial positions of Ricoh when expected cash flows could not be generated by failure to meet the target or other reasons.</td>
<td>As mentioned in risk “Alliances with other entities, strategic investment”, we deliberate on the appropriateness of the acquisition amount at the Investment Committee. We monitor progress after investment and have established a system to execute and manage business.</td>
<td>Growth Strategy #0, #1, #2</td>
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<tr>
<td>Defined benefit plan obligations</td>
<td>With respect to its employee benefit obligations and planned assets, the Ricoh Group accrues the cost of such benefits based on applicable accounting policies and funds such benefits in accordance with governmental regulations.</td>
<td>The Ricoh Group has reviewed and implemented systems as appropriate based on government regulations, human resource strategies and personnel systems.</td>
<td>Growth Strategy #0, #1, #2</td>
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<tr>
<td>4. Environment, disasters</td>
<td>Climate-related effects</td>
<td>The Ricoh Group recognizes climate change as a significant concern that may have an extensive impact on the entire world regardless of country and region, and therefore as a crucial issue that may affect its global operations. We carry out a range of measures against risks identified on the above recognition. Despite this, we still face a number of potential risks as described below, which may arise as a result of inadequate or delayed actions. (Transition risks) - Risks of increased costs, lost sales opportunities and damaged corporate brand resulting in decreased corporate value, as the result of failure to effectively respond to an extremely fast transition toward a decarbonized society.</td>
<td>To deal with each of the described risks, we have developed the following measures: (Transition risks) - To effectively respond to the transition toward a decarbonized society, we have set up an ESG Committee, chaired by the president and CEO, as a system to monitor trends in international environmental requirements so that we can review our environmental goals and prevent risks from arising or addressing actualized risks in a timely manner. - In 2019, climate change-related issues have been newly added to the Total Risk Management (TRM) system in order to enhance activity to cope with climate change transition risks. (Physical risks) - We are enhancing risk management involving the supply chain; sourcing from multiple suppliers and securing extra materials and parts stock. We also work with suppliers to improve business continuity management. For actions against damage caused by extreme climate events, please refer to the sections for risks within “large-scale disasters,” and “delayed and disrupted supplies of products over a prolonged period of time.”</td>
<td>Growth Strategy #0, #1, #2</td>
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<tr>
<td>Effects of disasters and other unpredictable events</td>
<td>The Ricoh Group will do its utmost to ensure the continuation of business activities, secure employee’s and their family’s safety, and fulfill its social responsibilities as a corporate citizen in the case of the event described below; Natural disaster (earthquake, tsunami, hurricane, flood, snowstorm, eruption, etc.) - Accident (Fire, eruption, Leak of hazardous materials, big accident of public transportation etc.) - Drastic situation change (Domestic warfare, International war, radical social movement etc.) - Incident (Teror, abduction, intimidation etc.)</td>
<td>The Ricoh Group has internal common regulations &quot;Ricoh Group Standard&quot; and has specified actions that Ricoh employee should take in emergent situations such as reporting structure, and the establishment of emergency headquarters and the roles so that every location can behave properly in emergency. Measures taken to mitigate such risks include periodic inspections of equipment and facilities, conducting disaster drills, implementation of systems to confirm employee safety and formation of a business continuity plan.</td>
<td>Growth Strategy #0, #1, #2</td>
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<td>5. Individual events</td>
<td>Ricoh India Limited</td>
<td>On January 29, 2018, Ricoh India filed an application to initiate the corporate insolvency resolution process with the National Company Law Tribunal, Mumbai (NCLT), pursuant to Section 10 of the Insolvency and Bankruptcy Code of India, 2016. The NCLT admitted the insolvency petition on May 14, 2018.</td>
<td>We allocated expenses which relate to Ricoh India of ¥6.9 billion, ¥11.7 billion and ¥14.9 billion in consolidated operating results for the years ended March 31, 2017, 2018 and 2019, respectively. As a result of allocating an additional loss in the consolidated operating results for the year ended March 31, 2019, we have allocated all the credits of Ricoh India.</td>
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**Refer to these pages**

- The Financial Irregularities at a Sales Subsidiary in India and the Subsequent Conditions P.15-16