NTN’s Future Vision

Our Vision

To enable sustainable growth over the next 100 years, we have created a long-term vision. In order to realize “Our Vision,” we will pursue competitive advantages by strengthening our core technologies and products, while developing businesses in new areas by harnessing our core technologies and R&D achievements.

We are also stepping up our development speed by proactively collaborating with outside partnerships, while enabling sustainable growth by creating a more robust business bases to support these new business areas.

1. A company where its corporate philosophy is understood by all employees around the world and where all employees think and act for themselves
2. A company with original new products and services, appreciated for its high quality and functions, and has a global presence
3. A company where everyone involved with NTN will be able to be proud of the "NTN" brand

Our vision toward a new 100 years

Management Policy

In December 2019, we established a Management Policy of the NTN Group. This represents the NTN Group’s management philosophy and stance, and is based on the founders’ spirit consisting of the “Frontier Spirit” and “Coexistence and Co-prosperity Spirit” and on our corporate philosophy that incorporates these spirits. In addition, the NTN Group has clearly stated its stance toward all stakeholders involved in the NTN Group. By steadily implementing initiatives based on the above, we aim to realize a NAMERAKA society.

Stance to Stakeholders

Employees

NTN Group respects diversity, individuality and a safe and healthy workplace environment where employees can work successfully.

Customers

NTN Group seeks to maximize customer satisfaction and trust by providing products and services of superior quality, safety and reliability.

Business partners

NTN Group, in a fair and free environment, builds good partnerships with its business partners and works together for mutual growth and development.

Local communities

NTN Group respects cultures and customs in the local communities and builds long-term trust relationships by meeting their expectations through its business activities.

Shareholders

NTN Group focuses on return for shareholders by sustainable profitable growth and builds long-term trust relationships with shareholders through active communications.

Environment

NTN Group harmonizes its business activities with nature and contributes to preserve the global environment by providing its technologies, products and services.

Numerical targets

<table>
<thead>
<tr>
<th>Automotive industry</th>
<th>Industrial machinery</th>
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<tbody>
<tr>
<td>$1 trillion yen or more</td>
<td>$1 trillion yen or more</td>
</tr>
<tr>
<td>Operating margin 10% or more</td>
<td>Operating margin 10% or more</td>
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<td>Total asset turnover 1.0 or more</td>
<td>Total asset turnover 1.0 or more</td>
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<tr>
<td>Exchange rate sensitivity To be halved from the current level</td>
<td>Exchange rate sensitivity To be halved from the current level</td>
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Changes in external environment

- Automotive industry
  - A change that occurs only once a century (CASE)
- Industriewide
  - IoT, robotization, and AI
- Social issues
  - Population increase, climate change, resource depletion, poverty, starvation, etc. (ODGs)

The target for fiscal year ending March 31, 2028 is the goal set at the beginning of planning.
NTN Revitalization Story | Business Operating Policy for NTN Revitalization

The business environment surrounding the NTN Group is facing unprecedented challenges, including a sharp deterioration in business performance due to the impact of the new coronavirus and uncertainty about the outlook for the future. Against this backdrop, we have established a Business Operating Policy for the fiscal year ending March 31, 2021 and beyond while continuing the basic policy of the “DRIVE NTN100” Medium-term Management Plan. In the fiscal year ending March 31, 2021, which is regarded as the Crisis Response Period, we will promote priority measures and link them to a new Medium-term Management Plan. In doing so, we will strive to improve our corporate structure for NTN Revitalization.

<table>
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<tr>
<th>Mid-Term Plan I</th>
<th>Mid-Term Plan II</th>
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<tr>
<td><strong>Crisis Response Period</strong> 2020*</td>
<td><strong>2022 to 2024</strong></td>
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**Important Measures in Crisis Response Period (Fiscal year ending March 31, 2021)**

1. Ensure the health and safety of employees
   - Manage employee health and control the spread of infections
   - Respond to requests from the national and local governments and constructing a global safety support system
   - Promotion of telework for the purpose of 3Cs (Closed spaces, Crowded places, Close-contact settings) prevention and social distancing
   - Maintenance of employees’ livelihoods

2. Secure cash and continue business
   - Reduce and minimize working capital
   - Secure ¥100.0 billion of business funds including conclusion of commitment line contract
   - Suppress capital investment (cut the investment by half)

**Prepare for future growth**

1. Freeze investment in capacity expansion and concentrate on investment for efficiency improvement and maintenance
2. Work style reforms centered on indirect departments
3. Withdrawing from unprofitable part numbers and expansion of aftermarket
4. Selection of new businesses and review the allocation of resources
5. Start and establish new IT core system, and create benefits at an early stage
6. Respond to SDGs

**Basic Policy in New Medium-term Management Plan (Fiscal year ending March 31, 2022 to March 31, 2024)**

1. Improve profitability and investment efficiency of existing products and businesses
   - Outsource existing products and businesses, concentrate management resources on products and processes where NTN can take advantage of our technological strengths
   - Promote improvements in productivity and operational efficiency through cutting-edge digital technologies, such as the new factory (Wakayama) established under the new concept (smart factory), the utilization of the new IT core system, and the introduction of RPA
   - Strengthen financial framework by reducing inventories by shortening production IT through production reforms, etc., thinking in a different way

2. Secure cash and continue business
   - Concentrate management resources on new businesses that are close to be commercialized and develop them into profitable businesses in a short period of time
   - Work on natural energy product business that contributes to environmentally friendly society

3. Management system enhancement, etc.
   - Establish strategic organization to implement measures that anticipate changes in the business environment
   - Strengthen further corporate governance and promote active dialog with stakeholders
   - Aim to achieve a work-life balance of each employee and create better work environment, promote reforms of personnel system to improve engagement
   - Have awareness of Sustainable Development Goals (SDGs) and contribute to solve social issues as a global Company

**Business Management Policies**

- **Main Strategy**
  - Digitalization (latest digital technology) X Resources (management resources that NTN has developed) = Innovation (development of innovative technologies, products and services)
  - Variable cost reformation (procurement reformation) X Efficiency improvement (achievement of the world’s No.1 productivity and quality)

- **Basic Policy**
  - Drive Forward Transformation of Business Structure for the new 100 years
  - Ensure the health and safety of employees
  - Improve profitability and investment efficiency of existing products and businesses
  - Materialize new businesses by creating new products and businesses
  - Secure cash and continue business
  - Prepare for future growth
  - Management system enhancement

**Business Operating Policy for the fiscal year ending March 31, 2021 and beyond while continuing the basic policy of the NTN Revitalization Story**

- **Increase added value**
  - Shift to fields (business, region) with high profit margins
  - Expand aftermarket Business through collaboration between industrial machinery and aftermarket
  - Increase prices for or withdraw from unprofitable projects
  - Break away from self-sufficiency

- **Reduce costs**
  - Reduce procurement and logistics costs
  - Reduce fixed costs

- **Improve cash flow**
  - Decrease inventories
  - Promote production reforms and make a shift to "Monozukuni" that generates cash

*Fiscal years ended/ending March 31
Management Commitment

Overcoming the Crisis Response Period For Future Growth

The global economy contracted due to the spread of the new coronavirus (COVID-19), and the NTN Group has also been severely affected. We are facing an extremely difficult situation due to deterioration in our business performance. However, I believe this is a good opportunity to accelerate our transformation, and I will work toward the revitalization of NTN with the resolve to surely carry it out.

Toward NTN's Revitalization

Overview of the fiscal year ended March 31, 2020

In the fiscal year ended March 31, 2020, net sales amounted to 651.5 billion yen, down 11.2% or 82.1 billion yen, from the previous fiscal year. This is due mainly to the impact of the spread of new coronavirus from the beginning of 2020 as well as the sluggish global demand environment caused by the intensified U.S.-China trade friction and other factors. Operating income was 7.1 billion yen, down 73.8% or 19.9 billion yen, from the previous fiscal year. Although we moved forward with lowering variable costs and reducing fixed costs such as personnel costs and expenses, we were unable to cover a significant drop in sales. In addition, we booked an extraordinary loss of 34.2 billion yen including an impairment loss of 29.0 billion yen and as a result, a net loss attributable to shareholders of the parent company amounted to 44.0 billion yen, our largest loss ever.

In the previous fiscal year (ended March 31, 2019), we recorded an impairment loss of 17.0 billion yen for fixed assets such as equipment in manufacturing divisions in Japan. In the fiscal year under review, we did not anticipate any impairment losses, but with regard to plants and manufacturing equipment that we considered incapable of recovering the investment amounts due to the unexpected impact of new coronavirus, we recorded impairment losses.

It is truly regrettable that we were not able to distribute dividends including the interim dividends of 5.0 yen. This is because our business performance has rapidly deteriorated due to the spread of the new coronavirus infections and the outlook for the future is uncertain.

Priority measures for the Crisis Response Period in the fiscal year ending March 31, 2021

In this tough business environment, the fiscal year ending March 31, 2021 is positioned as a "Crisis Response Period" in the coronavirus pandemic and we will take initiatives to "ensure the health and safety of employees" by thoroughly implementing measures to prevent infections. At the same time, we are working to "secure cash and continue business" in the event of an emergency, and to "prepare for future growth".

■ Ensure the health and safety of employees

Employees are our most important source of strength, and therefore we will implement measures to ensure the health and safety of employees and their families. In addition to establishing a safety support system on a global scale, we are working to prevent infections and promote teleworking.

■ Secure cash and continue business

We will focus on business continuity by reducing and minimizing working capital, including inventory assets, and securing 100.0 billion yen of business funds, including through conclusion of commitment line agreements.

■ Prepare for future growth

Regarding capital investment, we have decided to freeze investment for capacity expansion and concentrate on investment for efficiency improvement and maintenance. With regard to business operations, we will review the work itself that we have done so far and consider establishing a teleworking system, for example by developing a personnel evaluation system for teleworking. As for the new IT core system, which we have been switching over to as a foundation to support our business, we will put it into operation and firmly establish it, thereby producing results at an early stage. (See pp.17-18 for more details)

New Medium-term Management Plan starting from the fiscal year ending March 31, 2022

Accelerating transformation of business structure

A New Medium-term Management Plan will begin in the fiscal year ending March 31, 2022. In "DRIVE NTN100" a 3-year medium-term management plan that began in the fiscal year ended March 31, 2019, the NTN Group has been working on "developing innovative technologies, products and services," "variable cost reformation," "achieving the world’s highest productivity and quality," and "improved efficiency in asset management" by combining the latest digital technologies with the management resources we have cultivated. In response to major changes in the marketplace, we will accelerate transformation of our business structure as set forth in "DRIVE NTN100" under the New Medium-term Management Plan.

Details of the New Medium term Management Plan are scheduled to be announced by March 2021, and we will implement measures for ensuring business continuity and lowering the break-even point, with the aim of realizing the following three transformations.

■ Increase added value

1. Shift to fields (business, region) with high profit margins
2. Expand aftermarket business through collaboration between industrial machinery and aftermarket businesses
3. Increase prices for or withdraw from unprofitable projects
4. Break away from self-sufficiency

Going forward, we will shift our focus to highly profitable fields, businesses and regions, and endeavor to expand profits through collaboration between aftermarket and industrial machinery businesses. While working to provide high value-added products and expand new business areas, we will also raise prices for and withdraw from unprofitable projects.

We will break away from self-sufficiency, or our integrated production system that covers everything from pre-manufacturing processes (such as forging and turning) to assembly, and expand outsourcing of the pre-manufacturing processes. In the area of finished products, we will work to expand technical assistance and outsourcing of production through alliances with partner companies.

■ Reduce costs

1. Reduce procurement and logistics costs
2. Reduce fixed costs

We will accelerate variable cost reformation that supports our global procurement system. Although the procurement of materials was not greatly affected by the new coronavirus pandemic, we will look ahead to the post-corona world and promote stable procurement that is not affected by the external environment, as well as optimal procurement in terms of cost, function, and quality.

In addition to performing centralized purchasing by strengthening cooperation with major suppliers, we will change the composition of our suppliers while adding new suppliers. We will work with our partner manufacturers to promote structural reforms, build WIN-WIN relationships, and reduce purchasing costs. In terms of logistics, we will endeavor to improve efficiency by analyzing the flow of goods in Japan, and will review the transportation of goods to overseas areas, thereby reducing logistics costs.
■ Improve cash flow

1. Decrease inventories

2. Promote production reforms and make a shift to “Monozukuri” that generates cash.

Until now, we have been pursuing partial optimization that improves each process (equipment), such as reduction of cycle times. In the future, we will introduce a total optimization system that covers all areas of supply chain management, from material procurement to product sales, and produces just what is needed, only when needed, only in the quantity needed (just-in-time manufacturing). Under the leadership of the Production Reform Department established in June 2019, we are promoting company-wide production reforms. In doing so, we will construct new production processes to reduce lead times and inventories, thereby creating cash flow.

(See p.35 for more details)

Responding to climate change

In order to respond to climate change, we have started to quantify our contributions to climate change in the fiscal year ended March 31, 2019. (See pp.45-46 for more details) This not only visualizes the value NTN provides to society, but also helps raise employee motivation in the development process. In the future, we will increase the proportion of products with a higher degree of environmental contribution and expand our contribution to CO₂ reduction. On the other hand, we recognize that we are not able to set clear medium- and long-term targets for the environment, and we will consider numerical targets in conjunction with identifying materiality.

(See p.35 for more details)

Developing human resources that can play an active role on the global stage

We do not currently have any non-Japanese Directors or Executive Officers, but we have two foreign Operating Officers. In addition, our overseas employees account for more than 60% of our workforce, and many of the employees recruited locally in each country are working at the management level including top management and executives at our overseas affiliates around the world.

Since January 2019, a French Executive Officer has been leading the procurement division in strengthening global contribution. In the technical, administrative and other divisions, excellent human resources from overseas subsidiaries have demonstrated their abilities in dealing with global projects, and we will continue to expand the assignment of human resources from overseas. We will also promote diversity by strengthening the recruitment of non-Japanese employees in Japan, and promote transformation based on flexible ideas created by the fusion of different cultures.

Human resources are the foundation of our growth, and we will strengthen our business foundation by cultivating human resources that can play an active role globally.

Building basic policies for human rights, safety and health

In July 2020, we have newly established a Human Rights Policy and a Safety and Health Basic Policy. The Human Rights Policy has been established as a basis for day-to-day activities and business execution to ensure that all employees of the NTN Group share a unified sense of values, as the NTN Group further strengthens and promotes initiatives for human rights. The NTN Group contributes to international society through creating new technologies and developing new products, and supports the realization of a society in which human rights are respected. To achieve this, the NTN Group will continue its efforts to fulfill its responsibilities in respect of human rights, including the establishment and ongoing implementation of a human rights due diligence system.

The Safety and Health Basic Policy was established with the aim of raising awareness of safety among NTN Group employees and organizations, and further enhancing corporate value. It respects safety and health policies and approaches that have been fostered by each business site and country. We have demonstrated that the realization of a work environment that ensures the safety, health and active performance of everyone working in the NTN Group is the foundation of management and the most important value that takes precedence over everything. (See p.35 for more details)

Strengthening corporate governance

In June 2019, NTN has made a transition from a Company with Board of Company Auditors to a Company with Nominating Committee, etc. with the aim of establishing a proper decision-making structure and an operational execution organization, strengthening the supervision of management, and improving management transparency and fairness. At the same time, the number of Outside Directors was increased from 2 to 5, with the Nominating Committee, the Compensation Committee, and the Audit Committee all chaired by Outside Directors. In July 2020, a female Director (Outside Director) was newly appointed for the first time at the Company. We have always worked to promote diversity, and going forward, the female Director with experience in a different industry than ours will supervise management. This will enable us to integrate diverse values and accelerate transformation aimed at achieving sustainable growth.

Putting corporate philosophy into practice

Two spirits passed down from the founders of NTN are embodied in the corporate philosophy. “We shall contribute to international society through creating new technologies and developing new products.” Noboru Niwa and Jiro Nishizono, the founders of NTN paved the way for the domestic production of bearings that was sought in Japan at this time. This Frontier Spirit is linked to our business activities in the second half of our corporate philosophy, “through creating new technologies and developing new products: The Coexistence and Prospertiy Spirit cherished by our founders who hoped to contribute to the development of a variety of industries through the domestic production of bearings, remains in the first half of our corporate philosophy. “We shall contribute to international society”

In December 2019, we established a Management Policy of the NTN Group to express our management philosophy and stance on putting into practice the corporate philosophy that incorporates our founders’ ideals. We also clearly stated our stance toward stakeholders in order to become a company that is trusted and needed by stakeholders. (See p.16 for more details) To ensure that the more than 24,000 employees of the NTN Group worldwide promote the corporate philosophy, we hold a NTN PROUD AWARD, which serves as an opportunity to commend our employees who put the corporate philosophy.
Summary

As for the fiscal year ended March 31, 2020, we announced the outlook for net sales of 680.0 billion yen and operating income of 10.0 billion yen at our financial settlement briefing meeting for the third quarter that was held in February prior to the impact of the new coronavirus (COVID-19). However, the result was that net sales was 651.5 billion yen, substantially below expectations, largely due to the spread of COVID-19 in the fourth quarter.

Meanwhile, we tried to increase operating income as much as possible by thoroughly reducing fixed costs such as expenses and personnel costs in particular, thereby maintaining a level of 7.1 billion yen. Although we maintained a positive level of operating income, we posted a net loss of 44.0 billion yen, the worst figure in NTN's history. This was mainly due to the recording of extraordinary losses of 34.2 billion yen in particular, including an impairment loss of 29.0 billion yen as well as the recording of a 1.8 billion yen loss on dissolution of unprofitable joint ventures in China and South Korea that have no prospect of recovery as non-operating expenses.

Financial results for the fiscal year ended March 2020

We explain our Revitalization Scenario to our main financing bank and secured 100.0 billion yen of funds, including under commitment line agreements with our main financing banks. Obtaining a commitment line means that we can borrow from a bank at any time within the amount and period of the commitment line. It is roughly estimated that the amount of 100.0 billion yen is an additional amount, which is sufficient to sustain ourselves in the event of a 30% decline in annual sales. At the same time, we will consider and promote the utilization of factoring (liquidity of receivables) not only in Japan but also at overseas locations, and aim to collect and utilize surplus funds globally.

Securing sufficient cash

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Restraining outflow of funds

While securing sufficient funds, we will meticulously restrain the outflow of funds. To achieve this, we will first review our capital expenditures to 20.0 billion yen. Within this scope, we thoroughly examine the minimum investments required, but in principle, we will freeze new investments to expand capacity and prioritize the too many activities that are not crucial.
following investments in production reforms to improve current situations such as throughput, overhaul of existing facilities, and flexible setup response. Furthermore, regarding inventory assets, we will strategically increase inventories for aftermarket services with the aim of increasing sales in aftermarket business. At the same time, we will reduce OEM inventories and aim to achieve the Group-wide inventory asset turnover ratio of 3.6 as in the fiscal year ended March 31, 2020.

Preparing for Revitalization

Within the Group as a whole, we will clarify the business strategies for non-profitable companies and clearly determine the direction such as reconstruction, downsizing or closure. Each Business Headquarters will play a central role for domestic operations and the Office of General Managers for overseas businesses, while these headquarters and office work together with Corporate Strategy Headquarters, Finance Headquarters, and Production Headquarters to formulate concrete plans, including consideration of asset sales and business consolidation. The progress of these plans will be tracked in the New Mid-term Management Plan. At the same time, we will accelerate the implementation and promotion of measures to strengthen the “Product Portfolio” by withdrawing from the businesses. The progress of these plans will be tracked in the New Mid-term Management Plan. At the same time, we will accelerate the implementation and promotion of measures to strengthen the “Product Portfolio” by withdrawing from the businesses.

**NTN Revitalization Scenario**

**Definition of Revitalization**

NTN Revitalization means making it possible for us to create corporate value. Since the fiscal year ended March 31, 2020, we have introduced the concept of “Cost of Capital (WACC)” in our investment decisions and business evaluations in each country globally. Assuming that the return expected by our shareholders from the Company in the Japanese stock market is 8% at present, we have designed our consolidated WACC at 5%, so our mandatory target for consolidated ROIC (Return on Invested Capital) is 5% in the fiscal year ending March 31, 2024, to create corporate value under New Mid-term Management Plan, which is scheduled to start in the fiscal year ending March 31, 2022. In terms of management stability, our final target for Net D/E ratio is less than 1.0, and we have set the Net D/E ratio of 1.5 as a mandatory target for the fiscal year ending March 31, 2024. We aim to become a company that can steadily improve corporate value in the future by achieving the above-mentioned mandatory targets, maintaining ROE of 6% or more, retaining 4% to shareholders (ROE of 4%), and allocating the remaining 4% to sustainable growth in the future.

**Basic assumptions for the creation of corporate value**

In order to achieve ROIC of 5%, we do not rely on measures to increase net sales by expanding production capacity to increase production, and we aim to create a financial structure that can create corporate value with net sales of 700.0 billion yen. Specifically, the minimum targets of net sales and operating income are 700.0 billion yen and 42.0 billion yen (operating margin of 6%), respectively. To achieve this target, we will reduce the current variable cost rate of 55% by 3% ppts (net reduction) through our efforts such as raising selling prices and reducing procurement costs. At the same time, we will further review and reduce fixed costs, which we had drastically reduced in the fiscal year ended March 31, 2020. Through these measures, we will minimize any increase in personnel costs and expenses in response to a rebound in sales from fiscal year ending March 31, 2022, and lower our break-even point. For the fiscal year ending March 31, 2024, we will lower the break-even point to 80% of net sales, or 560.0 billion yen relative to net sales of 700.0 billion yen.

**Transformation of mindset toward Revitalization**

Prior to the Lehman Crisis, even though NTN’s asset turnover rate was much lower than that of its domestic competitors, NTN’s profitability advantage was due to its superior self-sufficiency from the pre-process, and both its ROIC and stock price were at higher levels. We need a “Structural Reform” based on a new mindset that will allow us to break away from our successful experiences in the past and secure a new competitive advantage. Based on this direction, we will consider promoting “Selection and Concentration” in the areas of asset sales, business integration and closure. The following section shows three reforms aimed at NTN Revitalization (corporate value creation) through an increase in free cash flows.

**Break away from our current corporate culture that relies too heavily on a KAIZEN spirit at manufacturing sites that respond to the demand of “R&D” OEM customers through continuous improvement of productivity and cost reductions**

In the face of changes in the business environment caused by low-price competition driven by Korean and Chinese companies in the industrial and automotive OEM market, we need to strengthen our marketing and cost quotation functions, as well as investment, planning, execution and follow-up functions of our pricing strategies in the sales division to secure our new competitive advantage. In addition to selecting customers and cultivating new target customers, we aim to improve the profitability of the OEM business by withdrawing from extremely unprofitable businesses, restraining price reductions, and thoroughly negotiating price increases. (Withdrawal from large low-profitability businesses and aggressively implement strategic precision pricing)

**Break away from our current corporate culture that has not implemented drastic measures while inventory asset turnover ratio is extremely low compared to our competitors in Japan**

In the midst of a significant deterioration in NTN’s profitability, which was once surpassed competitors in Japan, we need to promote marketing reforms based on KPIs centered on GMROI (Gross Margin Return On Inventory Investment) in order to maximize throughput to secure a new competitive advantage due to environmental changes in which our low inventory asset turnover is a major impediment to competition. In addition to reducing invested capital by reducing inventory assets, we aim to enhance our efforts to repeatedly examine aftermarket business and improve profitability by realizing flexible marketing for aftermarket services in our OEM production lines. (Break away from prioritization for OEM and ensure efficient production of profitable products for aftermarket services)

**Break away from our current corporate culture that attempts to internally accumulate added value as well as technological know-how by carrying out the entire process of development, manufacturing, and sales on its own**

In order to secure a new competitive advantage, we need to build and strengthen WIN-WIN partnerships based on mutual trust and respect with partners that have complementary capabilities to succeed together and with which synergy is expected to be created in each of our business areas and markets. This is because the burden of investment costs has increased and we have insufficient human, financial, and technological resources due to diversified customer requirements and increasingly sophisticated requirements in the global market. Through strategic partnerships, we aim to significantly reduce investments and supplement human and technical resources.