STRATEGIC AND EMERGING RISKS

Trends and connections

In 2019 we defined the basis to review and update our strategic and emerging risks. Our **trends and connections analysis** identifies global trends of high importance to Argos and the different interconnection degrees between them, through the following steps:

Identification

Our analysis is based on Strategic Intelligence, i.e., a platform by the World Economic Forum that identifies the main forces that influence the current global context, and the interconnections between them through **transformation maps** by topic**.** The content is defined by universities, think tanks, international organizations and research institutions.

We selected the relevant trends for Argos and extracted around 200 connections from each of their respective transformation maps. In addition, we reviewed each definition given by the platform and adapted them to the current company's context (see Appendix).

Visualization

We created a database with the resulting trends and their connections, in order to visualize them through a network map.

Our **trends and connections map** show the identified trends, the importance of each (weighted according to their frequency of appearance in our database), and the ways they are interconnected. This allows to cluster trends in broader categories according to the criteria that define them.

Our map enables us to identify the topics influencing our strategic and emerging risks.

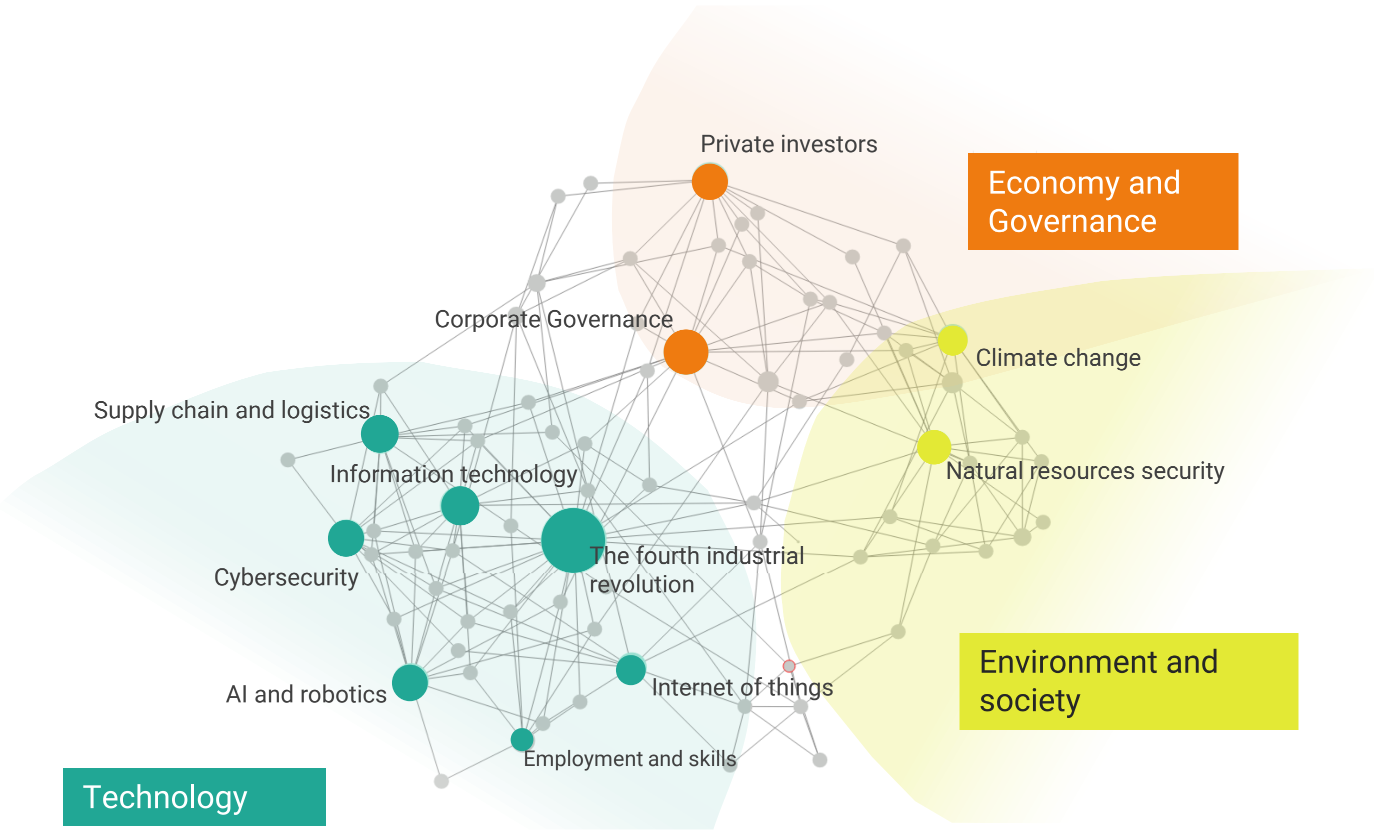
Network analysis

Our map counts on 76 trends that can be clustered in 3 major categories:

- Technology
- Economy and governance
- Environment and society

The map highlights the main trends influencing our Company, namely: the fourth industrial revolution, corporate governance, Information Technology, private investors, internet of things, artificial intelligence and robotics, cybersecurity, climate change, natural resource security, supply chain and employment and skills.

Our trends and connections map



Trends and risks

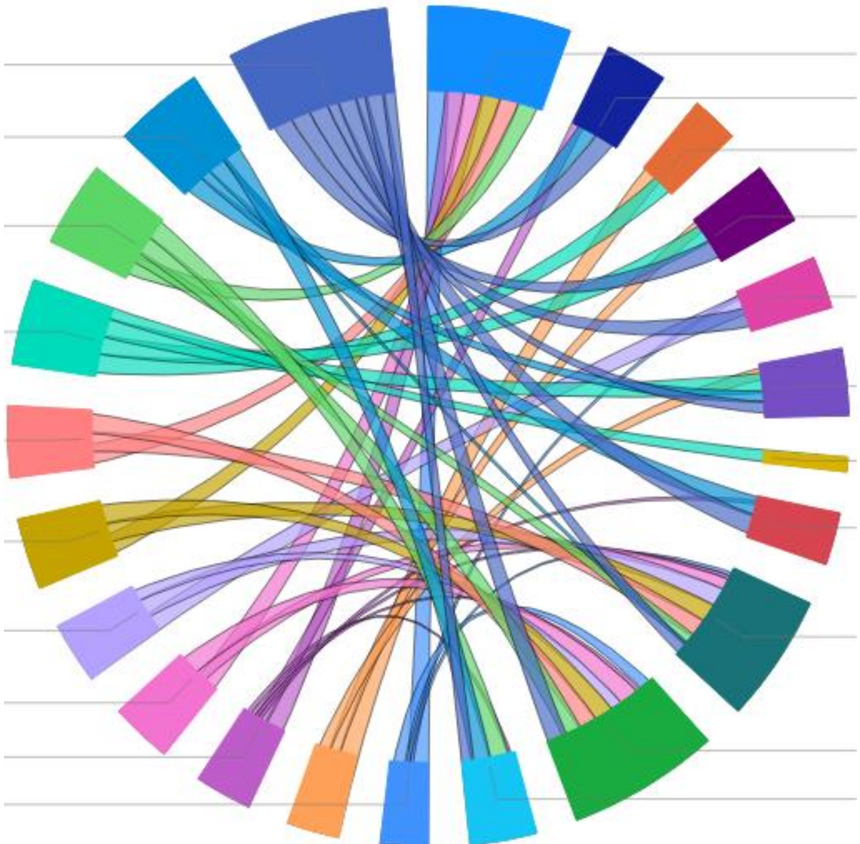
The identified trends were matched with our strategic and emerging risks, as well as the strength of their influence, which allowed to find potential updates that allow our risks better describe current and future challenges.

Results are not only used for updating our risks, but also to find trends or topics for which new risks may need to be considered in the future. For this, we count on visualization tools, in which risks and trends can be interconnected considering their respective magnitude of influence.

The following figures show the ways in which our strategic and emerging risks relate to the identified trends, allowing to highlight the risks that respond the most to the local context, and the trends that are mostly channeled through our risk management framework and scenarios.

We aim to update this exercise yearly, especially taking into account the rapid changes in the global context nowadays, which are continuously registered in the WEF’s transformation maps and should be reflected in our analyses.

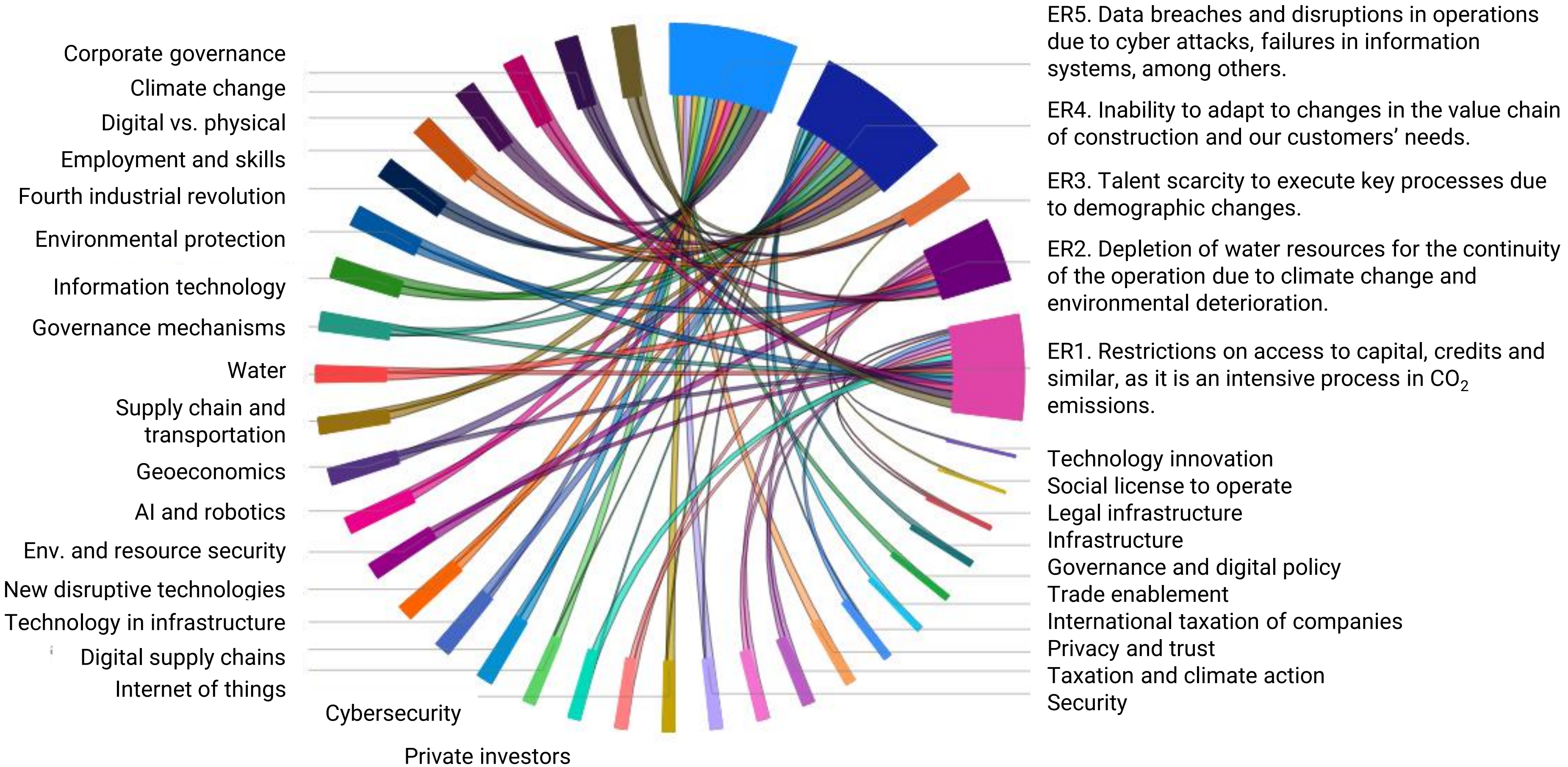
Trends and strategic risks



For extended names and descriptions of Argos' strategic risks, see pages 5-8.
This graph show the relations from the main trends, for better visualization,

The suitability and effectiveness of corporate governance, as well as the increasing security challenges derived from the increasing digitalization of our processes, are the main forces that determine our exposure to risks affecting the strategy. Risks addressing our current and future competitiveness and our relationship with stakeholders are the most connected to our global context.

Trends and emerging risks



For extended names and descriptions of Argos' emerging risks, see pages 9-12.

Our emerging risks are strongly related to most trends that characterize our global context. Technology, talent, natural resource security and the global climate change agenda, among others, represent the main challenges for the future sustainability of the company.

(A-RI1) (A-RI2) Strategic risks

Risk	Short description	Mitigation actions	Potential impacts
R1 Lower value generation (Ebitda or other indicator) due to not reaching the volumes or prices budgeted by the company due to the market situation.	Deviation against any variable or financial index due to changing market situations such as; imports, new entrants, construction cycles, exchange rates, competition, economic cycles, public infrastructure programs, etc.	* Argos BEST (Building Efficiency and Sustainability for Tomorrow) * Short- and medium-term management plan through OKRs * New Emerging Business Model for portfolio diversification	* Decrease in EBITDA * Limitations on the expansion plan and lower CAPEX * Less cash generation * Drop in volumes * Loss in credit ratings * Breach of debt covenants * Closing of operations and changes in work plans
R2 Delay or inability to close competitive gaps in operating and administrative costs and expenses.	Difficulties in supply negotiations, energy cost overruns, freight costs, shortage of raw materials and energy, lack of investment, lack of planning, lack of knowledge transfer, etc.	* Argos BEST (Building Efficiency and Sustainability for Tomorrow) * Synergies through the Shared Services Center * Cross-company Excellence Networks * Definition and standardization of the corporate maintenance model based on best practices in the industry	* Decrease in EBITDA * Less cash generation * Investments with returns below expectations * Loss of opportunities to reduce the environmental footprint of operations (water, carbon, among others)
R3 Inability to adapt to changes in the value chain of construction and our customers' needs.	Failure to achieve business sustainability by not delivering integrated and competitive solutions to the construction market, facing changes or disruptions in its model (for example: standardized, modularized and prefabricated construction components, Industrial Revolution 4.0)	* Business intelligence * R&D initiatives. * Collaborative program that encourages innovation facing new challenges to the company. * New businesses oriented to broader needs of clients.	* Market loss associated with increased demand for substitute products. * Increase in costs and reductions in business profitability. * Loss of value from new businesses that could be leveraged on the company's experience in the sector.

(A-RI1) (A-RI2) Strategic risks

Risk	Short description	Mitigation actions	Potential impacts
R4 Not achieving the financial flexibility required by the company.	Failure to achieve growth due to effects on the profitability of the operations (non-compliance with operational EBIT), financial crises, supply shocks, demand shocks, country risk, etc., which hinders access to capital for doing necesary investments, and can generate a downgrade in credit ratings.	* Divestment plan * Optimization of the financial cycle (regional) * Establishment of an OKR plan (Objectives and Key Results) with objectives and indicators focused on increasing financial flexibility	* Fall in short- and medium-term credit ratings * Increase in financing costs * Closing of financing alternatives * Limitations to access international markets * Decrease in equity value
R5 New policies or changes in regulation that affect business performance or the development of projects.	Impact on profitability due to new taxes, regulatory changes, price controls, etc.	* Action plans related to the commitments made in the Paris agreements * Constant monitoring of the normative and regulatory changes *Advocacy to the climate change agenda through organizations	* Decrease in profitability marginsfrom unforeseen cost overruns derived from regulatory changes * Reputational impacts due to possible regulatory breaches * Loss of competitiveness against imported goods due to differences in the countries' trade policies
R6 Stakeholder actions that negatively affect the company's operations or the development of projects.	Opposition of interest groups through blockades, de facto channels, group actions, outflow of investment capital, expropriations, etc.	* Local Relationship Plan that is based on the analysis of risks and relation mechanisms with local communities * Support and customer loyalty strategies for different business lines * Mechanisms to support and empower local suppliers	* Asset damages * Unsafe environments * Delays in the start of critical projects * Reputational impacts from situations with specific stakeholders

(A-RI1) (A-RI2) Strategic risks

Risk	Short description	Mitigation actions	Potential impacts
R7 Low appropriation of the company's culture behaviors due to lack of governance mechanisms and talent development	Lack of the employees' sense of belonging to the company's objectives due to low appropriation, generational changes, low effectiveness in talent retention and attraction policies, lack of clarity of the organizational relationship model and its application, as well as the lack of development of leadership capacities.	* Strategic communications plan * Human management policies * Intercultural training for employees * Definition of decision rights matrices and role charters * Shared Services Center	* Low contribution to the development of the strategy * Difficulty and slowness to make the changes required by the organization * Loss of productivity * Loss of key talent
R8 Inability to achieve and maintain environmental standards (normative or voluntary) that ensure the management of environmental and social impacts of operations.	Failure to make the appropriate investments for the technological renovation of equipment that allows monitoring of environmental variables, lack of human resources, their development and awareness of environmental problems.	* Environmental strategy, which includes the pillars of water and biodiversity, climate change, emissions and circular economy, with their respective indicators, goals and action plans * Permanent monitoring of changes in environmental regulation in each of the countries where we operate	* Possible non-compliance with regulations or standards (current or new) * Opposition of stakeholders to operations and projects * Generation of negative externalities to society * Operational cost overruns derived from shortage of raw materials * Reputational impacts from environmental incidents
R9 Occurrence of natural events that affect the continuity of key operations. (hurricanes, floods, landslides, droughts, earthquakes, among others)	Climate change and variability increases the frequency and severity of natural events that affect employees' operations, infrastructure, and integrity. Additionally, we have exposure to other events such as earthquakes.	* Corporate risk retention and transfer plan * Contingency plans * Plans for climate change adaptation in facilities * Emergency Response Action Plan (PARE)	* Loss of income and market share due to delays in large infrastructure projects * Property damages and impacts on profit derived from extreme weather events * Decrease in EBITDA * Increase in the costs of risk transfer mechanisms * Losses via deductibles

(A-RI1) (A-RI2) Strategic risks

Risk	Short description	Mitigation actions	Potential impacts
R10 Adverse decisions that significantly impact the financial results and the reputation of the company	Sanctions or fines imposed by the authorities, or sentences for damages to third parties.	* Legal teams to ensure regulatory compliance and guarantee adequate corporate governance mechanisms * Quality Policy and teams focused on guaranteeing compliance with product standards * Insurance policies that cover the responsibility of the company and its managers * External legal advisory	* Fines and penalties derived from adverse decisions * Reputational impacts * Loss of profitability due to the payment of fines, penalties and claims * Increase in the costs of risk transfer mechanisms * Losses via deductibles
R11 Data breaches and disruptions in operations due to cyber attacks, failures in information systems, among others.	Vulnerability in cyber security, lack of availability of the network, hacking of the internal network or web pages, cyber hijacking, viruses, denial of service, etc.	* Information and security policies and procedures. * Information management and cyber assets together with risks and control measures. * Controls and technological architectures for operational security, information and protection from advanced malware. * Specialized monitoring of cyber events and management of security incidents. * Periodic actions of monitoring and evaluation of vulnerabilities to implement timely corrections (eg ethical hacking). * IT backup and continuity strategy. * Adoption of cloud services (cloud security). * Methodology for cyber risk management. * Best practice benchmarks. * Business continuity management plans.	* Reputational impacts or interruption of operations due to the loss or theft of stakeholders' information. * Increase in fraud or digital crime due to weak security controls and growth in cyber attacks worldwide. * Breaches in reporting or custody of information. * Fines or penalties for inconsistencies in reported information.

(A-RI1) (A-RI2) Emerging risks

Main trend	Emerging risks	Description	Related strategic risks	Potential impacts	Opportunities	Mitigation actions
Climate change	ER1. Restrictions on access to capital, credits and similar, as it is an intensive process in CO_2 emissions.	Due to environmental awareness in the world, large investors and financial institutions have set greater limitations on their investment portfolio policies.	R4-R5-R6-R8-R10	* Reputational impact due to changes in the credit ratings motivated by ESG criteria (environmental, social and governance). * Difficulty in attracting investments due to a greater association of the industry to climate change risks and environmental impacts. * Cost overruns due to increased interest rates from financing sources.	* Communicate the company's actions for mitigating and compensating its environmental impacts. * Develop products for sustainable construction markets through innovation. * Participate in green credit lines for projects socially and environmentally responsible.	* Technological renovation projects. * Environmental strategy. * Use of alternative materials and fuels. * Measurement, reporting and verification of CO_2 emissions. * Identification, analysis and quantification of the company's contribution to climate change and the impacts on society derived from it. * Definition of sustainability attributes in the product portfolio.
Environment and resource protection	ER2. Depletion of water resources for the continuity of the operation due to climate change and environmental deterioration.	As a consequence of climate change, exposure to changes in water availability (droughts or floods) and quality (contamination) can affect direct operations by restricting water access for both the community and the company.	R5-R6-R8-R9-R10	* Impact on the continuity of operations. * Opposition to the operation by communities in the areas of influence * Increased operational costs * Denials of permits for new operations and facilities.	* Participate in river basin conservation initiatives. * Innovate in production techniques and new products that promote reducing water consumption. * Savings derived from decreased water consumption. * New business opportunities and increased income related to products with sustainability characteristics.	* Environmental strategy with emphasis on water risk management, which includes prospective analysis through the Global Water tool, Aqueduct and Water Risk Filter, as a basis for future investments. * Technological renovation to reduce water consumption. * Operational efficiency projects. * Quantification of water flows to the operations.

(A-RI1) (A-RI2) Emerging risks

Main trend	Emerging risks	Description	Related strategic risks	Potential impacts	Opportunities	Mitigation actions
Employment and skills	ER3. Talent scarcity to execute key processes due to demographic changes.	Potential unattractiveness that the professions we require and our industry profile face, given new generational trends and challenges in talent development.	R7	* Not having the talent with required skills for operations and projects. * Difficulties in knowledge transfer processes from retiring experts to incoming staff. * Costs associated with developing higher incentives to increase the company's attractiveness in the job market. * Fewer opportunities to capture trends and develop innovative ideas.	* Develop a local qualified workforce, favoring the communities in our areas of influence. * Further fostering internal mobility programs for qualified staff. * Developing incentive plans more suitable to the expectations of new generations. * Design new talent management and succession schemes based on the needs of new generations.	* Talent Management Policy, with guidelines regarding labor practices, talent attraction, retention, and development. * Diversity policy, with the company's commitment to inclusiveness and equality. * The Employer Brand Program for talent recruitment. * Continuous measurement and monitoring of work environment indicators and organizational climate surveys. * Involving our talent in fostering innovation through specific challenges based on company needs (Ideaxion). * Training and development programs to strengthen the organizational culture in new and existing employees.

(A-RI1) (A-RI2) Emerging risks

Main trend	Emerging risks	Description	Related strategic risks	Potential impacts	Opportunities	Mitigation actions
The fourth industrial revolution	ER4. Inability to adapt to changes in the value chain of construction and our customers' needs.	Failure to achieve business sustainability by not delivering integrated and competitive solutions to the construction market, facing changes or disruptions in its model (for example: standardized, modularized and prefabricated construction components, Industrial Revolution 4.0)	R1-R2-R3	* Market loss associated with increased demand for substitute products. * Obsolescence of Argos' current assets and higher opportunity costs of investing in new operational assets (costs of acquiring more suitable machinery and equipment and costs of disinvesting in Argos' current asset structure). * Increasing costs related to potential redefinitions of business' strategies (e.g., developing new business lines, creating spin-offs or expanding to other geographies). * Decreases in business profitability. * Loss of value from new businesses that could be leveraged on the company's experience in the sector.	* Explore new products and production techniques. * Offer services with a differentiated value proposal based on customer segments. * Expand our product and services portfolio to other market segments. * Offer new solutions in alliance with other segments of the value chain and other sectors.	* Business intelligence * R&D initiatives. * Involving our talent in fostering innovation through specific and collaborative challenges based on company needs (Ideaxion). * New businesses oriented to broader needs of clients..

(A-RI1) (A-RI2) Emerging risks

Main trend	Emerging risks	Description	Related strategic risks	Potential impacts	Opportunities	Mitigation actions
Cybersecurity	ER5. Data breaches and disruptions in operations due to cyber attacks, failures in information systems, among others.	Vulnerabilities in cyber security, lack of network availability, hacking of the internal network or web pages, cyber hijacking, viruses, network interruptions, etc.	R2-R3-R10-R11	* Reputational impacts or interruption of operations due to the loss or theft of stakeholders' information. * Increase in fraud or digital crime due to weak security controls and growth in cyber attacks worldwide. * Breaches in reporting or custody of information. * Fines or penalties for inconsistencies in reported information.	* Strengthen cybersecurity governance and processes within the company. * Migrate towards more collaborative ways of working and stricter protocols in virtual channels. * Facilitate the experience to our end customer. * Reduce the degree of transactionality in the processes.	* Information and security policies and procedures. * Information management and cyber assets together with risks and control measures. * Controls and technological architectures for operational security, information and protection from advanced malware. * Specialized monitoring of cyber events and management of security incidents. * Periodic actions of monitoring and evaluation of vulnerabilities to implement timely corrections (eg ethical hacking). * IT backup and continuity strategy. * Adoption of cloud services (cloud security). * Methodology for cyber risk management. * Best practice benchmarks. * Business continuity management plans.

Appendix: trend definitions

Fourth industrial revolution

It is a new chapter in human development, which is enabled by technological advances by merging the physical, digital and biological worlds in ways that create both promise and risk. The speed, breadth and depth of this revolution is forcing us to rethink how organizations create value.

Corporate governance

Having strong governance mechanisms, both internal and external, and with adequate incentive plans that guarantee economic gains in the short term without compromising the sustainability of the company in the long term, promoting an inclusive social environment in the operations of different countries.

Information technology

Telecommunications and computing equipment through innovation are changing the way of interacting, expanding the limits of information technology and the advances of the industry, impacting businesses, social relationships, privacy and resilience, all of which creates the need for changes in governance and digital policies.

Private investors

Private investors, such as hedge fund investors, private equity firms, and venture capital firms, act as intermediaries by deploying capital on behalf of limited partners. They are influenced by changes in regulation, changes in confidence levels and the disruption of their business models, especially now, amid the shocks caused by the fourth industrial revolution.

Internet of things

The Internet of Things, or IdC, surrounds us with a network of interconnected smart devices and services capable of perceiving or even listening to requests or needs and acting on them. For Argos, the IdC is enabling new services, business models and forms of cooperation, which allow for agile and effective interactions with our clients and other stakeholders.

Artificial Intelligence and robotics

Researchers in the fields of robotics and computing are trying to give machines the ability to acquire real-world data in different ways. This may result in machines that can autonomously adapt to circumstances as their environments change.

Environment and society
Economy and governance
Technology

Appendix: trend definitions

Cybersecurity

The rapid advances in digital interconnection make it increasingly difficult to maintain adequate levels of cybersecurity, so companies must increasingly use new technological resources to face these risks.

Climate change

Climatologists have long warned that in order to have a reasonable probability of avoiding a catastrophic level of climate change, the concentration of CO_2 in the atmosphere must be kept below 450 parts per million. In 2016, the threshold of 499 parts per million was crossed for the first time, highlighting the need to accelerate climate action by governments, companies and the society.

Environment and resource security

Global environmental risks related to extreme weather events, plus the possible failure of efforts to reduce climate change and natural disasters. The tangible impacts of climate change are becoming increasingly apparent, and new forms of cooperation between the public and private sectors will be needed to develop appropriate and innovative responses.

Supply chain and logistics

The supply chain is the system on which our transactions are based, allowing not only the distribution of inputs, but the maximum use of our vertical integration. Planning, optimization and real-time monitoring of our supply chain is the pillar of the continuity of our operations, since it is necessary to design agile contingency plans that respond to the needs of the end customer in case an incident occurs. The complexity of supply chain management is constantly increasing, covering topics ranging from technology, transportation, and their environmental impact and vulnerability.

Employment and skills

Companies with more successful approaches will be those that have a solid understanding of demographics, changing job roles, and evolving demand for skills, and will take advantage of the breakthrough as a means of designing ideal contemporary workplaces.

Environment and society
Economy and governance
Technology