

Committed to our clients

Consistently exceeding the expectations of our clients is instrumental to building our leadership position in the business consulting industry.



>1,500

global and local clients



300

of which are new



>100

specialized publications



Client focus

The client is the reason we are in business and is our main management priority



Our success is due to our clear focus on the client, with whom we work closely and whose expectations we strive to exceed in order to become a trusted partner. We implement a client relationship model that allows us to know each client's specific needs and to be in a position to offer each client a differentiated value proposition.

Management Solutions provides value-added services that stand out for the durability of results and practicality of implementation.

Client diversification

Management Solutions pursues sustained growth supported by client diversification, seeking a balance between large multinationals and national leaders. At year end, Management Solutions had over 1,500 active clients (300 of them acquired in 2022), grouped into three major segments: multinationals of American or European origin, local entities, and national or regional confederations, which are all leading organizations in their respective markets.

In addition, Management Solutions has continued to strengthen links with regulators (central banks, international organizations, national regulators and supervisors, etc.) in the main industries in which we operate.

Global model

Management Solutions has a strong presence in local markets, but always under the umbrella of global corporate policies. The whole Management Solutions group operates as a single unit rather than an association of local firms under one brand.

Acting and feeling as part of a team, sharing the Firm's mission, goals, culture and values, are essential to successfully meet our clients' transformation processes and strategic challenges, wherever they arise.

As a professional services firm, our mission is to develop solutions that help our clients to fulfill their objectives as effectively as possible. We are firmly committed to offering services of the utmost quality, as this is the underlying motive of all our actions and the driving force behind our growth.

For this reason, all of our internal processes are subject to strict quality rules in the belief that, with the support of our highly conscientious professionals, they will facilitate the achievement of this fundamental aim. This level of quality is based on the expertise of our professionals, for whom there are ongoing training and refresher plans, and on the direct and active participation of more experienced staff on each project.

Quality control methodology

The main aim of our quality system is to guarantee that every job meets the levels of quality, value and service expected by the client. Accordingly, as a minimum, we must ensure that:

- ▶ There is coherence and consistency between the job to be done and the final product, both being clearly documented.
- ▶ The necessary knowledge and experience have been applied.
- ▶ The specified work has been competently carried out and correctly documented.
- ▶ The final products satisfy the specific requirements and are produced within the agreed upon time frame.

Each project is broken down into different activity stages or groups of activities.

The activities to be performed, their order and required techniques are detailed for each project stage while the resulting deliverables and roles involved in their production are also specified.

We perform quality control from beginning to end on all

projects in order to guarantee quality levels both internally and externally (services provided to clients).

Management Solutions has a Quality and Internal Audit Area whose aim is to strengthen the Firm's control framework and to ensure it complies with regulatory requirements (certifications, audits, etc.).

This area is global in scope and covers functions related to business activities as well as provides support to our professionals across the Firm's units. They are responsible for the following:

- ▶ Corporate policies.
- ▶ Quality (certifications from quality assurance agencies, Quality Assurance process, etc.).
- ▶ Compliance with both external and internal regulations.
- ▶ Internal audit.

ISO 9001 quality certification

The Spanish Association for Standardization and Certification (AENOR) acknowledges that Management Solutions' management system is compliant with the ISO 9001 standard for business consulting activities and related technologies.

UNE-EN ISO 9001 certification shows that the management system implemented in the Firm meets the highest quality standards, ensuring resource availability, process control and continuous improvement in the provision of services.

Providing top quality service is at the core of our business

Quality Control Methodology

Activities

- ▶ Project scope review
- ▶ Definition of review milestones
- ▶ Design review
- ▶ Intermediate review
- ▶ Final review
- ▶ Project file

Deliverables

- ▶ Review plan
- ▶ Review reports
- ▶ Design/intermediate review reports (for internal use)
- ▶ Final analysis
- ▶ Final report
 - Proposal accepted by quality control
 - Document of acceptance from client
 - Authorized quality control documents
 - Finance and billing structure
 - Project plan with assigned responsibilities for each task
 - List of deliverables
 - Client satisfaction survey

Commitment to the industry

We share the expert knowledge generated by the Firm

In addition to conducting specific conferences on relevant topics of interest related to the Firm's areas of operation, we have an ongoing schedule of external knowledge sharing activities, some of the most significant being our publications and our presence in professional forums.

In this chapter, we highlight the main activities carried out in the field of specialized dissemination during the year.

Publication of studies and industry reports

During 2022 Management Solutions published a white paper related to the challenges and opportunities in the field of social impact measurement.

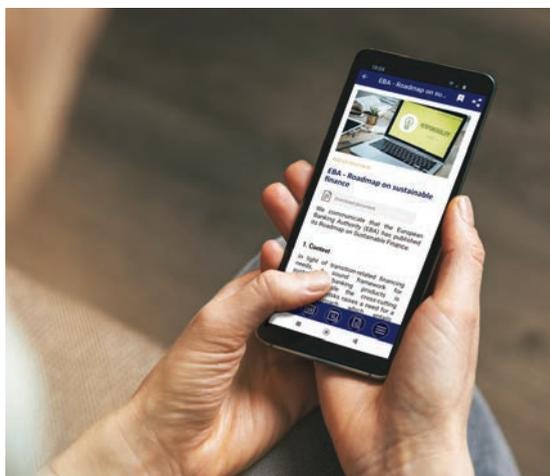
Challenges and opportunities in social impact measurement

Today, the business world is facing a growing number of challenges from multiple sources. In the words of Klaus Schwab (World Economic Forum), "for businesses, the economic, technological and reputational pressures of the current context carry the risk of a disorderly collapse and threaten to leave large numbers of workers and companies behind".

Some of these challenges are global warming and environmental deterioration, the inefficient use of natural resources, the increase in migratory crises, the violation of human rights, war conflicts, food crises in certain regions, employment crises, or the serious health crisis resulting from the COVID-19 pandemic, which in turn exacerbates these challenges and jeopardizes progress made in terms of development and social advancement.



FinRegAlerts, Management Solution's financial regulatory alerts app



Since 2018, Management Solutions' financial regulatory alerts service has been supported by FinRegAlerts, an app for mobile devices developed by Management Solutions to facilitate the monitoring of financial regulatory alerts published by international, European and local regulators (US, UK and Spain).

FinRegAlerts currently includes access to the following contents:

- ▶ **Publication alerts:** summaries of documents published by international regulators (BCBS, FSB, etc.) and European regulators (European Commission, ECB, EBA, etc.), as well as some relevant local publications (Spain, USA and UK)..
- ▶ **Quarterly and yearly regulatory outlooks:** reports that collect publication alerts and anticipate key regulatory changes.
- ▶ **Technical notes:** summaries containing details of regulations that have a major impact on or hold the greatest interest for the financial industry.

The app is available for free download from major application stores.

Among them, social and environmental challenges have a particularly broad resonance with society, key stakeholders and regulators and supervisors, which is conditioning company strategy. According to the United Nations Global Compact:

“Social sustainability is about identifying and managing the business impact, both positive and negative, on people. The quality of a company's relationships and engagement with its stakeholders is critical. Directly or indirectly, companies affect what happens to employees, workers in the value chain, customers and local communities, and it is important to manage impacts proactively”.

Responding to these challenges requires a "sustainable transformation" of the business fabric in order to ensure its long-term resilience. This implies a paradigm shift in all areas: corporate strategy, product and service offerings, risk analysis, the operating model, relations with customers and suppliers, communication, etc. In short, the evolution towards a new business model in line with sustainability principles, particularly social and environmental ones.

The corporate sector is already immersed in this transformation, in response to changes in demand from customers and investors.

Examples include, among others, the following:

- ▶ **Efficient treatment of raw materials:** adaptations to transformation processes (manufacturing, packaging, packing, equipment maintenance, etc.). Some initiatives include the search for efficiency in the consumption of natural resources (use of certified raw materials, use of recycled or recyclable materials, etc.), and product adaptations to make them more sustainable (products without planned obsolescence, products that can be reused, refurbished, remanufactured or recycled, etc.).
- ▶ **Changes to distribution processes:** incorporation of environmental and people care principles such as the promotion of the local economy, the hiring of people at risk of exclusion and the restructuring of supply chains to improve transportation processes (reorganization and coordination of routes, more effective groupage, transformation of fleets, creation of offshore logistics hubs, etc.).

- ▶ **Development of sustainable technologies:** comprising approved accessibility criteria, inclusive technological developments in the use and application of technologies and systems, and embedment of social policies in development projects (work-life balance policies, promotion of team diversity, etc.).
- ▶ **Human resources management:** incorporation of social and environmental criteria in the remuneration policies of company governing bodies, appointment of independent roles, implementation of policies to promote social rights, etc.

This transition towards a sustainable economy has led to the so-called "environmental, social and governance impacts of an organization's activities" becoming fundamental in business management. And this trend has sparked interest in measuring the value that companies' activities, projects and investments generate, in an effort to anticipate how opportunities may be captured and the risks associated with ESG impacts may be mitigated.

Commitment to the industry

But how an “impact” can be defined? There is still little concreteness in the definition and scope of what constitutes a social and environmental impact; the ecosystem is still in the process of developing a common language. Some of the definitions proposed by international organizations with a relevant role in the ecosystem are:

- ▶ The European Commission and the Group of Experts on Social Entrepreneurship (GECEs) in its report "Proposed Methods for Measuring Social Impact" defines social impact as follows: "the reflection of social outcomes as measurement, both long-term and short-term, adjusted for the effects achieved by others (alternative attribution), for effects that would have happened anyway (deadweight), for negative consequences (displacement) and for effects declining over time (drop off)".
- ▶ According to the World Bank, environmental and social impacts refer to any actual or potential changes in relation to: (i) the physical, natural, or cultural environment, and the (ii) impacts on the wider community and workers as a result of the project activity in question.
- ▶ Impact Management Project, an initiative that, since its launch in 2016, has brought together more than 2,000 professionals from the social impact measurement and management ecosystem, defines it as: "The positive and negative, primary and secondary long-term effects produced by an intervention, direct or indirect, intended or unintended".

As can be seen, the definitions all agree on the idea of generating changes in human welfare even if they are slightly different from each other. In an attempt to overcome the confusion arising from the absence of a common notion of social impact, the Social Impact Chair at Comillas Pontifical University, Open Value Foundation, Repsol Foundation, Management Solutions recently proposed a definition that has been endorsed by a large number of experts in the field:

“The changes experienced by both people and the planet as a result of a particular activity, program or policy, which affect

human conditions over the long term. These changes may be measurable, positive or negative, intended or unintended, tangible or intangible”.

In addition to reviewing the definition of social impact, many questions are addressed: How are social, environmental and good governance impacts measured? Are there standards that define the methodology and make it possible to build sustainability strategy reporting and monitoring exercises? Where do the difficulties currently lie in implementing these social and environmental impact measurement exercises in organizations? What is the current state of development of these practices in the business world and what are the future trends in the market? *tendencia futura del mercado?*

In this context, the document published by Management Solutions attempts to answer these questions by structuring itself into three sections:

- ▶ Regulatory context: the document will first provide a brief review of the regulation, focusing on Europe and on international standards setting out the first guidelines on social impact measurement and reporting.
- ▶ Characteristics of the impact measurement and management process: the paper will then discuss the social impact measurement and management process in organizations, under different approaches, illustrated with a practical example.
- ▶ Benchmark practices: finally, an analysis will be provided on good market practices adopted by several companies that have already started to measure and manage their social impact, with a description of the measurement goals, the processes implemented, the characteristics of the reporting and communication exercises, etc. *ticas de los ejercicios de reporting y comunicación.*

Macroeconomic outlook reports

Management Solutions continuously monitors developments related to the key macroeconomic indicators for the economies in which the Firm operates so that the Firm can draw conclusions on expected developments for the future..

This monitoring activity is reflected in our quarterly “Macroeconomic Outlook Report”, a document that also provides insight into the key indicators affecting the industries in which Financial Institutions operate (Banking and Insurance), and the Energy and Telecommunications industries.

Regulatory notes

As a firm providing professional consulting services for regulated industries, Management Solutions specifically monitors the regulatory environment affecting the industries in which it operates. On a weekly and quarterly basis, the Firm tracks major regulatory developments in the industries to which it provides advice, and compiles technical notes on regulatory developments that will have the greatest impact on those industries. Regulatory notes seek to summarize the rule, put it into context and explain some of its potential impacts.

Specifically, during 2022 Management Solutions prepared eight technical notes on the most relevant regulations published by reference institutions, such as the handbook for the validation of IRB systems or the discussion paper on the role of environmental risks in the prudential framework, both published by the EBA; the proposed rules on ESG disclosure published by the SEC; the discussion paper on the physical risks of climate change by EIOPA; the Taxonomy Extension Reports published by the PSF (Platform for Sustainable Finance); the Regulation on European Data Governance adopted by the European Parliament and the Council in May 2022; or the proposal for a Directive on Corporate Sustainability Due Diligence published by the European Commission.

Organization and participation in specialized conferences and seminars

CGRE: XXI Annual Risk Conference, Spain

Management Solutions sponsored the 21st Annual Risk Conference organized by the Risk Management Club of Spain (CGRE), which was attended by representatives of international regulatory and supervisory bodies, as well as executives from leading Spanish financial institutions.

Under the title "Por Terra Ignota...", the aim of the conference, held at Santander Spain's headquarters in Madrid in a hybrid format (in-person and streamed live), was to share the views of regulators and financial institutions on current issues of maximum interest to the sector.

Seminar on Artificial Intelligence and Innovation at the Círculo de Empresarios, Spain

The Círculo de Empresarios organized the seminar "Artificial Intelligence and innovation - application in value chains an link between academia and business", which included an address by Ms. Carme Artigas, Secretary of State for Digitalization and Artificial Intelligence in the Government of Spain, followed by a round table featuring the participation of Mr. José Duato, Professor at the Polytechnic University of Valencia (UPV) and Academician of the Royal Academy of Sciences of Spain; Ms. Ernestina Menasalvas, Professor at the Polytechnic University of Madrid (UPM) and Head of Artificial Intelligence, and Mr. Javier Calvo, Partner at Management Solutions.

The event, jointly organized by the Círculo de Empresarios groups for Digital Transformation, chaired by Mr. Alfonso Serrano-Suñer, and Science and Innovation, co-chaired by Mr. Gil Gidron and Mr. Vicente López-Ibor, included an address by Ms. Carme Artigas, who emphasized the

importance of carrying out reforms to make the most of investments in Artificial Intelligence and innovation.

The Secretary of State's address was followed by a round table discussion moderated by Mr. Vicente López-Ibor and featuring Mr. José Duato, Ms. Ernestina Menasalvas and Mr. Javier Calvo. The panel discussed topics of interest such as the need for more universal and anonymized databases that bring together information not only from individual companies, the need for collaboration between academia, business and the public sector, as well some case studies on the application of Artificial Intelligence in different industry sectors.

Webinar on the implications of SIAR for the insurance industry, Colombia

Management Solutions organized a webinar to share the implications of implementing SIAR (Integrated Risk Management System) with the Colombian insurance market. The webinar was attended by more than 100 representatives from 20 insurance companies.

SIAR, the new regulation laid down by the SFC (Colombia's Financial Superintendency), allows companies to have a global vision of the risks to which they are exposed, as it provides guidelines on risk governance and covers the definition of a risk appetite framework in line with international best practices.



Seminar on Artificial Intelligence and Innovation at the Círculo de Empresarios, Spain

Commitment to the industry

We have an ongoing calendar of outreach activities and presence in specialized forums

Management Solutions' webinar intended to share insights on the requirements for implementing SIAR and its implications, with a special focus on the considerations to be born in mind in terms of governance and risk measurement, risk appetite framework, stress exercises, IT infrastructure and data quality.

Climate risk management course in collaboration with IFC Green Banking Academy

As part of their collaboration in climate risk training, Management Solutions and the IFC Green Banking Academy from the International Finance Corporation (IFC) – a member of the World Bank Group, organized the first Climate Risk Management Course for the banking sector in Latin America, with business support from FELABAN (Latin American Federation of Banks).

The course, designed and taught by IFC and Management Solutions experts in sustainable finance and climate risk management, was attended by 68 professionals from the banking sector working in the areas of risk, business or sustainability at 31 different financial institutions from 14 countries in the Latin American region. The course advanced the climate risk integration agenda in the banking sector, consistent with the World Bank Group's commitments to aligning with the Paris agreement.

Management Solutions organizes a round table on ESG risks, Denmark

Management Solutions organized a meeting in Copenhagen (Denmark) with representatives of leading financial institutions to discuss issues related to climate risk, risk assessment integration and the European Central Bank's ESG stress testing exercises.

Management Solutions moderated the meeting, which was attended by leading local and global financial institutions present in Denmark such as Santander, ING, Unicredit, Credit Suisse, Danskebank, Nordea, DNB, OP, AIB, Nykredit, HCOB and Sparebank 1.

Management Solutions participates in "Risk Nordics 2022", Denmark

In addition to its involvement as a sponsor, Management Solutions participated as a speaker at the two Risk Nordics events held in 2022. Risk Nordics is one of the most relevant industry events in the Nordic countries, bringing together every year the main financial institutions and insurance companies in the region, as well as European regulators such as the EBA and the ECB, with the aim of addressing key risk issues for institutions in Scandinavia, Finland, Iceland and the Baltic countries.

In the spring event, Mr. Manuel Guzmán, partner at Management Solutions, opened the event and gave a presentation entitled "Building climate risk resiliency into the financial system", which addressed issues such as international regulations and standards on climate risks, the ECB's supervisory expectations, and the implications and challenges around models and data faced by organizations as they transform to address climate change-related risks.

Ms. Sara de Francisco, partner at the Firm, led the panel of CROs and Chief Risk Officers "Exploring Capital Allocation for 2022", which examined the short and medium-term priorities for the Risk areas in the Nordic region.

In the November event, held under the title "Climate risks: physical and transition risk management", Mr. Manuel Guzmán, partner at the Firm, made an assessment of the



BCBS (Basel Committee on Banking Supervision) principles-based approach to improving climate risk management, delving into the need to prepare for the transition to a decarbonized economy, including an analysis of measurement methodologies and potential impacts on banks' capital requirements.

Workshop on the impacts of BACEN's ESG standards on development banking, Brazil

Management Solutions participated as a speaker at the workshop on climate, social and environmental impacts on the financial and non-financial risks of development banks, organized by the Brazilian Development Association (ABDE) with the support of the Inter-American Development Bank (IDB).

The workshop aimed to discuss the impact of climate, social and environmental changes on risks, highlighting the main financial regulation initiatives and standards in the agenda of the Central Bank of Brazil (BACEN) for sustainability risk management. The event was attended by professionals from the risk, business and sustainability areas of ABDE member institutions, regional development banks and Brazilian development agencies.

Evolution of pricing models in the insurance sector, Brazil, Mexico, Colombia, Peru and Chile

During 2022, Management Solutions joined efforts with Akur8 to organize a series of webinars in several Latin American countries on "New pricing models in the insurance sector". During the webinars, experts from both firms shared the main pricing trends for new production and portfolio renewal in insurance companies, with a focus on non-life insurance.

Webinar in partnership with addactis® for the Brazilian insurance industry

Management Solutions collaborated with addactis® to organize the webinar "Evolução dos modelos de pricing no setor de seguros" in which Brazilian insurance companies participated.

During the webinar, Management Solutions and addactis® experts explained the current context and the importance of having tools that help boost sales by adjusting insurance prices to each client's price elasticity, presenting the different functionality offered by addactis® and demonstrating the insurance pricing modeling process.

II Meeting - Machine Learning in the Financial Sector, Brazil

Management Solutions collaborated with Bradesco in delivering a seminar on trends in Artificial Intelligence and Machine Learning, as well as the main challenges of these new technologies.

The meeting, organized by Bradesco, a leader in the banking sector in Brazil, was held virtually and was attended by more than 200 participants from various areas. Key trends in these new technologies were shared, as well as Management Solutions' view on the main challenges involved in the implementation of projects for financial institutions, new regulatory paradigms and case studies of projects already carried out by the Firm.



Commitment to the industry

Payments and Sustainability Roundtable, United Kingdom

Management Solutions participated in a round table discussion organized by UK Finance, the main association for the finance and banking industry in the UK. The event was attended by members of the association and examined some aspects related to sustainability payments such as green finance, the search for greener financial services or payment systems/products as a tool for supporting clients' sustainability objectives.

Soledad Díaz-Noriega and Félix Ramírez, partners at the Firm, discussed the impacts and opportunities for the British financial industry in this area.

"Algo Risk Conference, United States

Management Solutions participated as a speaker at the "Algo Risk Conference", a global virtual event organized by SS-C Algorithmics and attended by professionals from financial institutions and corporations from around the world.

Management Solutions' presentation, entitled "Model risk management: a journey from compliance to efficiency", provided attendees with an overview of some of the main challenges facing the industry in relation to model risk management, such as the treatment of AI/ML models, model lifecycle automation and model risk management as a lever for efficiency.

Management Solutions participates in Convention A, Spain

Management Solutions participated in Convention A, a first-time global actuarial event with the slogan 'Connecting Knowledge' that was organized by various institutions including the International Association of Actuaries with the collaboration of the Institute of Spanish Actuaries (IAE), of which the Firm is a sponsoring member.

The Convention discussed topics such as IFRS 17, sustainability, health, social welfare, the economics of aging and the challenges facing actuaries. Management Solutions' presentation, given by Mr. Manuel Guzmán and Mr. Albert de Paz, partner and director at Management Solutions, respectively, focused on "Methodologies for calculating the impact of climate risk on insurance companies".

Convention A provided over 180 hours of actuarial content in English, German, French and Spanish to more than 35 participating organizations.

Webinar on Model Risk Management at FEPMCMAC, Peru

Management Solutions organized a webinar on Model Risk Management which was attended by members of the Federation of Peruvian Savings and Credit Banks.

The webinar, organized in the wake of the new regulation on Model Risk by the Peruvian Superintendency of Banks and Insurance, was attended by representatives of 12 Peruvian Municipal Savings and Loan Associations that had undertaken some of the reforms (framework, governance, policies and procedures, tasks and outputs at the development, validation and monitoring level, as well as industry models and related technologies).

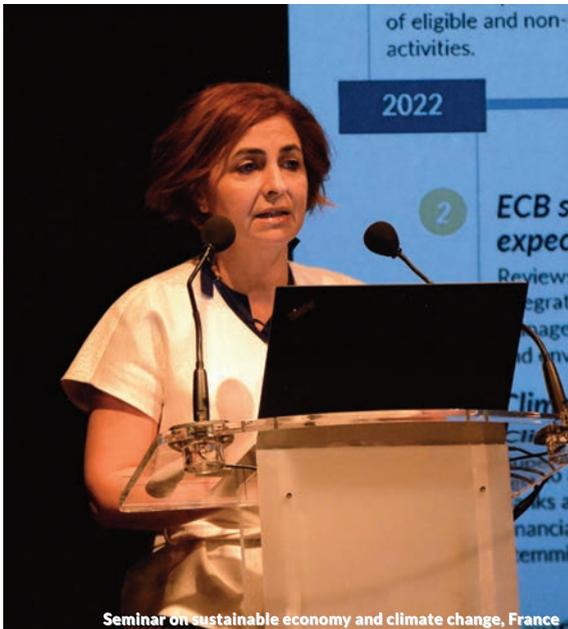
Social Impact Breakfast: International Standards on Business Impact on the SDGs, Spain

Management Solutions organized a breakfast meeting on Social Impact, held at the Management Solutions offices in Torre Picasso, which was attended by Mr. Jeremy Nicholls – a world-class expert who is Assurance Framework Lead for the SDG Impact Standards working group at the United Nations – as well as by sustainability executives from different strategic sectors of the economy.

During the event, attendees had the opportunity to learn about the work being carried out by the United Nations, led by Mr. Jeremy Nicholls, in defining standards that facilitate the integration of the social impact factor in business management and decision making.

Seminar on sustainable economy and climate change, France

Management Solutions sponsored and participated as a speaker at the seminar "*La finance verte et le climat dans le secteur bancaire*" organized by Revue Banque and attended by representatives from international financial institutions.



The event, held both onsite and online and solely sponsored by Management Solutions, was organized with the aim of reviewing the main regulatory and management challenges that financial institutions have to face when directing their investments towards the green transition, increasing their transparency in sustainability (ESG), managing their climate risks and, ultimately, ensuring the resilience of the financial system.

The seminar, moderated by Soledad Díaz-Noriega, partner at Management Solutions, was attended by representatives from organizations such as the Autorité de Contrôle Prudentiel et de Résolution (ACPR), the Fédération Bancaire Française (FBF), the Autorité des Marchés Financiers (AMF), and Société Générale and Credit Agricole.

Management Solutions' presentation was entitled "Risques ESG et défis pour le secteur financier" and shared with attendees the main challenges facing financial institutions in their transition towards sustainability..

14th National Credit Congress, Spain

Management Solutions participated as a sponsor in the 14th National Credit Congress, an event organized in Madrid with the aim of reviewing how the financial sector was coping with a macroeconomic reality marked by the post-Covid recovery, the Ukraine war crisis and the lack of supplies.

The event, which brought together the main players in the Spanish credit sector and debt management market, was attended by more than 1,500 professionals from financial institutions, funds and providers.

Sustainability and climate risks in the financial sector, Poland

Management Solutions organized the conference "Sustainability and Climate Risks: Why is it important for banks in Poland?" on sustainable finance and climate risk in collaboration with the IFC and Związek Banków Polskich (the Association of Polish Banks), which was attended by representatives of local and international financial institutions present in the country.

The two-day event was attended by experts from IFC, who shared their experience in sustainable finance and the opportunities arising from climate change for the Polish sector, and from Management Solutions, who discussed the challenges arising from the implementation of Pillar III, on the one hand, and the implementation of the EU Taxonomy, on the other, areas in which the Firm has experience and success stories.

Industry 4.0 Breakfast: Opportunities of Artificial Intelligence in the field of Sustainability, Spain

Management Solutions organized a breakfast meeting attended by sustainability executives from different strategic sectors of the economy (such as energy, steel, automotive, consumer goods, infrastructure and construction).

The event sought to present the Firm's credentials in the application of Artificial Intelligence (AI) in the field of sustainability through two success stories.

The first success story involved the use of artificial intelligence (AI) and natural language processing (NLP) to identify a company's ESG-related events in the news and social networks. The second success story entailed the use of AI and modeling mechanisms to analyze the potential impact of physical events arising from climate change on a company's productive assets.

European Leasing & Consumer Credit Annual Convention, Portugal

Management Solutions participated as a sponsor at the European Leasing and Consumer Credit Annual Convention, which this year took place in Cascais (Portugal) and was attended by more than 400 executives from 30 countries.

The Convention, which is organized annually by the European associations Leaseurope and Eurofinas, addressed the challenges for the consumer finance industry in the current environment and the transition to sustainable consumer finance.



Recent contributions in climate change, Spain

Commitment to the industry

XVII Risk Management Symposium of the ABM, Mexico

Management Solutions participated in the largest annual event organized by the Association of Banks of Mexico (ABM), delivering two specialized workshops.

The first, on Climate Risk, focused on measuring the impact of this risk on the credit quality of portfolios and on climate risk metrics. The workshop on Model Risk offered a practical approach supported by the Gamma tool developed by Management Solutions.

The event was attended by more than 500 members of the Association, authorities and other members of the Mexican financial sector.

ABI Supervision, Risk & Profitability Congress, Italy

Management Solutions sponsored and participated as a speaker at the Supervision, Risk & Profitability banking conference, an event organized by ABIEventi and promoted by ABI (Italian Banking Association).

The Congress, an international benchmark in banking, held in Milan and aimed at experts in the areas of credit, risk management, finance, investment banking, etc., was attended by leading representatives of financial institutions (Banca d'Italia, Unicredit, Intesa Sanpaolo, Banco BPM, Deutsche Bank, Iccrea Banca, etc.) and academic professors from the country's leading universities, as well as key figures from the Italian financial industry, who were also speakers at the event.

Management Solutions' presentation, given by Mr. José Luis Carazo and entitled "Pillar 2: risks and the model risk

framework", addressed the main challenges to the current state of the art in model risk management for national and international banks.

15th Annual Banking Credit Risk Management Summit, Austria

Management Solutions sponsored and participated as a speaker at the 15th Annual Banking Credit Risk Management Summit, organized in Vienna (Austria) and attended by representatives of local and international financial institutions present in the country.

During the congress, which was attended by representatives from entities such as Deutsche Bank, Credit Suisse, Rabobank, Crédit Agricole, Société Générale, Santander, Raiffeisen, etc., attendees had the opportunity to discuss key issues for the industry, such as the challenges and implications in credit risk management, IFRS 9, the new regulation for AIRB models, how



to define and develop an adequate risk appetite framework, the main challenges in stress testing or the main innovations arising from the digitalization of credit risk management.

Management Solutions' presentation, given by Mr. Javier Calvo and Mr. Francisco Pérez Calurano, partners at the Firm, was entitled "Six unsolved issues in model risk for credit risk models" and reviewed open issues in model risk, such as risk management of Artificial Intelligence models, the treatment of non-models, model life cycle automation, and the dissemination of model risk culture in the organization, among others.

IV European Congress of Actuaries, Spain

Management Solutions participated in the 4th edition of the European Congress of Actuaries (ECA2022), held in Madrid and attended by 250 actuaries from all over Europe, as well as participants from Canada, Costa Rica, Ecuador, Argentina, Mexico and Colombia.

The event, organized by the Actuarial Association of Europe (AAE) and the Institute of Spanish Actuaries (IAE), included the participation as speakers of Mr. Marcos Fernández and Mr. Manuel Ángel Guzmán, partners at Management Solutions, whose presentations focused on issues related to climate risk management and stress tests applied to the insurance industry.

International Insurance Convention 2022, Colombia

Management Solutions collaborated once again as a sponsor of the 2022 International Insurance Convention organized in Cartagena de Indias by Fasecolda - Federation of Colombian Insurers.

Top-level guests and insurance industry experts discussed topics such as the impact of the global crisis on the country's future, the new government's fiscal measures and structural reforms, the new vision of agricultural insurance, Colombia's environmental policy roadmap, insurance and climate change, and innovation in the digital era.

XX Asobancaria's Financial Risk Congress, Colombia

Management Solutions sponsored the 20th Financial Risk Congress organized by the Association of Banks of Colombia (Asobancaria) held in Cartagena de Indias.

The Congress, which was attended by more than 300 representatives from the Colombian financial sector and other countries in the region (Panama, Costa Rica, Ecuador, etc.), aimed to review the main risks of the industry by analyzing the challenges, regulatory developments and trends affecting the financial market.

Climate scenarios and their application in financial risk analysis, Mexico

Management Solutions participated as a speaker in "Climate scenarios and their application in financial risk analysis", a hybrid format workshop organized by the Latin American Climate Assets Disclosure Initiative (LACADI) in collaboration with the United Nations Environment Program.

The workshop, held in Mexico City, was attended by national and international experts who guided the attendees in the use of climate scenarios, with special emphasis on assessment methodologies and existing climate regulations, and the most relevant risks for the financial sector in Mexico.

During Management Solutions' presentation, which was given by Mr. Matías Cajiao, Partner of the Firm, a practical case study on measuring the impact of climate risk in insurance companies was presented and resolved.

Webinar on upcoming BIS III challenges, Chile

Management Solutions, in collaboration with Moody's Analytics and the Chilean Banking Association (ABIF), organized a webinar to present to the Chilean banking market the outlook for progress and upcoming challenges in the Basel III implementation agenda in the country. During the event, which was attended by more than 200 representatives from most of the Chilean financial institutions, the Firm had the opportunity to share the experience of adapting to BIS III in Europe and in several countries in the Americas.



"We have been at the forefront of industry knowledge for twenty years with the sole purpose of developing differential value propositions for our clients"

Thanks to our industry specialization, we are able to provide clear answers to the main challenges of the different industries in which we work.

Leveraging our presence in major industries worldwide, we seek to transfer best practices between different sectors, identifying those issues that are better solved in one sector than in another. This is possible because we work for the leading organizations in their respective industries and geographies.

We are firmly committed to sharing the knowledge generated by the Firm. For this reason, we have always committed to maintaining a selective presence in the main industry forums of the countries in which we operate, as well as to the organization of webinars on industry trends and the publication of specialized studies on relevant aspects for each industry.

Pedro Martínez
Partner at Management Solutions