We are pleased to present the results of the 2020 European Risk Manager Survey. The survey has taken place every other year since 2002 and represents the widest available picture of views of professional risk managers across Europe.

The publication of the 2020 Survey is taking place in exceptional circumstances. Before the outbreak of the Covid-19 virus, we could have looked at these results and said risk management in Europe was continuing to develop along familiar lines.

Cyber risks were ever more dominant, and economic instability was still an important issue. But risk managers were also increasingly concerned about the sustainability of their organisations in the long term and the consequences of climate change and natural catastrophes. The insurance market was hardening, and alternative forms of risk transfer and finance, including captives, were already becoming attractive.

If we did this survey today, the results would show some changed priorities. The economic damage resulting from the pandemic would almost certainly be at the forefront of risk managers’ concerns for their organisations in the immediate and medium term. Furthermore, as the crisis has accelerated the digital transformation, cyber risk would also be a short-term priority. The trend evidenced in the survey about the risk managers’ continuous involvement in the digital transformation of their organisations and their own functions should intensify.

Although immediate attention will focus on recovering from the pandemic, sustainability will remain a key issue and source of opportunities as well as risks. Environmental threats and geopolitical disruptions could lead to more crises in the near future. The survey shows that risk managers look forward to playing a growing role in sustainability and want to become better equipped to do so. It is today a necessity.

As questions arise about the capacity of ERM to identify the relevant risk scenarios and insurance to help deal with the crisis, we believe that it is also an opportunity to heighten awareness of the value of sound risk management. What the survey does show us – and this would not change – is that the risk manager is increasingly well qualified to participate in the discussions and contribute to the resilience of his/her organisation as we learn the lessons of Covid-19. The importance of professional education and qualifications for risk managers has never been higher.

Dirk Wegener, President of FERMA
Charlotte Hedemark Hancke, Chairman of the 2020 FERMA Survey Committee and Board Member of FERMA

Jean-Pierre Hotin, Lead Partner Risk Assurance and Advisory Services, PwC
Françoise Bergé, Partner Risk Assurance and Advisory Services, PwC
**Key findings**

**SURVEY RESPONDENTS**

- **Sector of activity**
  - 54% Industry
  - 29% Financial services
  - 13% Services
  - 4% Public sector

- 32% of risk managers are women.
- 59% have more than 10 years' experience.
- 80% work in large listed or privately held organisations.
- 1/3 of respondents are solely dedicated to Enterprise Risk Management (ERM) activities, 1/3 perform both ERM and Insurance Management (IM) activities and 1/3 are specifically dedicated to insurance activities.

**TWO-THIRDS OF RISK MANAGERS HAVE A QUALIFICATION IN RISK MANAGEMENT**

- 77% of risk managers say that a recognised certification matters in practising risk management and rank internal recognition as the first benefit of a certification.
- 64% have a specific qualification in risk and/or insurance management.
- 36% do not have a specific qualification.

**TOP RISKS**

*Top 5 risks within the next 12 months*
- Cyber threats
- Uncertain economic growth
- Availability of key skills
- Data fraud or theft
- Over-regulation

*Top 3 risks within the next 3 years*
- Cyber threats
- Speed of technological change
- Uncertain economic growth

*Top 3 risks within the next 10 years*
- Climate change and environmental damage
- Changing customer behaviour
- Extreme weather events

**COVID-19**

On January 9, 2020, the Chinese health authorities and the World Health Organisation officially announced the discovery of the coronavirus. The survey to collect the data for this report was sent to risk managers throughout Europe on January 28, 2020. At the time, the coronavirus outbreak had not spread massively in Europe.

The survey was online until March 13 and when asked about the most critical threats to their organisations' growth prospects, 14 respondents specifically commented on the emerging Covid-19 crisis and 1 respondent mentioned a "world epidemic" as the most critical threat. Pandemic had not been included in the survey as a specific option, but a comment field allowed respondents to include other threats.

The intensity of the crisis that Europe and the world is facing today brings to the fore the need to better assess and address systemic scenarios arising from digital, demographic, environmental and geopolitical changes. The risk manager is well positioned to contribute to this work, thanks to his/her growing role in aligning risks and strategy and in business continuity management.
INTEGRATING ENVIRONMENTAL SOCIAL GOVERNANCE (ESG) RELATED RISKS SHOULD BE THE FOCUS IN THE COMING YEARS FOR RISK MANAGERS WITH REGARD TO SUSTAINABILITY

78% of the risk managers involved in sustainability are contributing to the development of ESG reports (risk mapping, extra-financial reporting), and 22% are ESG coordinators within their organisations. Many face challenges integrating ESG risks into ERM risk analyses. The main ones are the difficulty of scoping sustainability risks (81%) and the limited knowledge of sustainability risks (70%).

40% of risk managers are playing or are planning to play a specific role regarding ESG-related risks.

A strong and stable relationship with the IT and information security teams.

Risk managers’ interactions with IT and information security teams

<table>
<thead>
<tr>
<th>Information security</th>
<th>No relationship / Involvement</th>
<th>Under the risk manager’s responsibility</th>
<th>Occasional collaboration</th>
<th>Regular, close collaboration based on a clear mandate</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT</td>
<td>9%</td>
<td>10%</td>
<td>36%</td>
<td>45%</td>
</tr>
</tbody>
</table>

How do you deal with risks arising from emerging technologies?

- Identification and assessment of risks prior to adoption of new technologies by the business: 37%
- Identification and assessment of emerging technologies used by the business: 39%
- Analysis and remediation of any insurance coverage gaps: 24%

The main obstacles to the use of new technologies are the heavy investments they represent for the function (53%) and the lack of perceived added value for the function (32%).

Cyber threats were identified by 69% of the risk managers using innovative technologies as one of the most critical risk to their organisation’s growth prospects.

Risk managers’ concerns regarding the four following insurance market topics

- Limitations and exclusions on emerging specific risks: 90% Concerned, 10% Not Concerned
- Change in market conditions: 88% Concerned, 12% Not Concerned
- Concentration of insurance: 68% Concerned, 32% Not Concerned
- New regulations: 41% Concerned, 59% Not Concerned

Increased attractiveness of captives: +28%

Industry is the 1st sector of activity that currently uses captives (41%) and plans to use a captive within the next 2 years (43%).

Use of common technologies:

- 58% use web-based applications
- 53% use data analysis
- 35% use data visualisation

A GROWING ROLE IN DIGITAL TRANSFORMATION

67% of the risk managers use in their activities innovative technologies: data analysis, data visualisation, process automation and/or artificial intelligence.

A strong and stable relationship with the IT and information security teams.

Risk managers’ interactions with IT and information security teams

<table>
<thead>
<tr>
<th>Information security</th>
<th>No relationship / Involvement</th>
<th>Under the risk manager’s responsibility</th>
<th>Occasional collaboration</th>
<th>Regular, close collaboration based on a clear mandate</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT</td>
<td>9%</td>
<td>10%</td>
<td>36%</td>
<td>45%</td>
</tr>
</tbody>
</table>

How do you deal with risks arising from emerging technologies?

- Identification and assessment of risks prior to adoption of new technologies by the business: 37%
- Identification and assessment of emerging technologies used by the business: 39%
- Analysis and remediation of any insurance coverage gaps: 24%

The main obstacles to the use of new technologies are the heavy investments they represent for the function (53%) and the lack of perceived added value for the function (32%).

Cyber threats were identified by 69% of the risk managers using innovative technologies as one of the most critical risk to their organisation’s growth prospects.

Risk managers’ concerns regarding the four following insurance market topics

- Limitations and exclusions on emerging specific risks: 90% Concerned, 10% Not Concerned
- Change in market conditions: 88% Concerned, 12% Not Concerned
- Concentration of insurance: 68% Concerned, 32% Not Concerned
- New regulations: 41% Concerned, 59% Not Concerned

Increased attractiveness of captives: +28%

Industry is the 1st sector of activity that currently uses captives (41%) and plans to use a captive within the next 2 years (43%).

Use of common technologies:

- 58% use web-based applications
- 53% use data analysis
- 35% use data visualisation
Contents

Foreword ...................................................... 1
Key findings .................................................. 2
Contents ..................................................... 6
Methodology and survey respondents ................... 8
  Methodology ............................................... 8
  Profile of respondents ..................................... 9
How did risk managers see risks in 2020 prior to the Covid-19 crisis? .......... 14
  Top 5 critical threats to the organisation’s growth prospects within the next 12 months ........ 15
  Top 15 critical threats within the 12 next months .................. 16
  Top 3 critical threats within the next 3 years and next 10 years .... 17
Part I: The risk manager’s growing role in the digital transformation .......... 18
  Innovative risk management practices continue to develop .......... 18
  Risk management contributes to the digital transformation of organisations .................. 21
  Focus on cyber threats ..................................... 23
Part II: The risk manager’s contribution to sustainability .......... 24
Part III: The risk manager facing hardening insurance market conditions ....... 26
  Tougher insurance market conditions are risk managers’ top concern 26
  The rise of captives confirmed ............................ 27
  Insurance management purchasing contrasted .................... 30
Part IV: The risk manager’s education and the increasing importance of certification ................................ 32
  Qualification in risk management .................................. 32
  Certification .................................................. 33
Part V: The risk manager’s presence and interaction within the organisation ......... 36
  Levels of interaction with the 3 lines of defence .................. 36
  The risk manager’s presence at a strategic level of the organisation .. 39
The data in this report were collected from an anonymous web-based survey distributed through FERMA’s 22 member associations and the PwC European network between January and March 2020. Responses were received from 764 respondents in 34 countries aggregated into 3 clusters:

- **Western Europe:** Belgium, Cyprus, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Monaco, Netherlands, Portugal, San Marino, Spain, Switzerland, UK, Vatican City
- **Central and Eastern Europe:** Albania, Armenia, Austria, Bulgaria, Czech Republic, Georgia, Hungary, Kazakhstan, Lithuania, Romania, Russia, Slovenia, Turkey
- **Northern Europe:** Denmark, Finland, Norway, Sweden

Some questions are triggered by the answers to others. Thus, the number of respondents can vary from one question to another. In addition, some questions allowed multiple choices, so the responses may add up to more than 100% in some cases.

The report comprises a detailed description of the survey respondents, a summary of how risk managers saw risks in 2020 prior to the Covid-19 crisis, analysis of answers to the sets of questions listed above and country files summing up the data per country (some countries were grouped when the number of respondents was not significant).

### Profile of respondents

#### Distribution by sector of activity

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>54%</td>
</tr>
<tr>
<td>Financial services</td>
<td>29%</td>
</tr>
<tr>
<td>Services</td>
<td>13%</td>
</tr>
<tr>
<td>Public sector</td>
<td>4%</td>
</tr>
</tbody>
</table>

More than half of the respondents are risk managers in the industry sector, while financial services represent one-third of the sample. Services other than financial (13%) are under-represented in the survey considering their increasing weight in the economy.

The public sector represents 4% of the sample (about 30 respondents in total). Therefore, these responses cannot be considered as representative.

The sample includes mainly risk managers from large (listed or privately held) organisations. In small and medium size companies, risk management responsibilities are often covered by the CFO or legal officer.
What is the size of your organisation?

- Large (≥ 250 staff headcount, > € 50 m turnover): 7%
- Small (< 50 staff headcount, ≤ € 10 m turnover): 8%
- Medium-sized (> 250 staff headcount, ≤ € 10 m turnover): 37%
- Total: 80%

What is the type of your organisation?

- Listed entity: 4%
- Privately held entity (incl. family owned): 12%
- Branch of a listed entity: 13%
- Government entity: 8%
- Not for profit: 12%
- Entity owned by venture capitalists: 35%
- Total: 37%

Three profiles of responsibility

- Enterprise risk management (ERM) profile: oriented towards overall risk management of the organisation. Business risks are identified, analysed, treated and reduced.
- Insurance management (IM) profile: oriented towards insurable risks, including loss prevention and risk transfer.
- Mixed ERM / IM profile: works on insurance, loss prevention and wider risk management issues.

In 2020, the split between the 3 profiles is balanced.

Some of the survey questions are specifically addressed to one profile, so the answers are representative of the profile and the related risk management activities.

Risk management teams consist of 1 full time equivalent (FTE) for 34% of ERM departments and 29% for IM departments. 37% of ERM departments and 33% of IM departments have 2 to 3 FTEs.

There is a balance between operational and strategic activities in the top six activities in the scope of risk managers’ ERM (or ERM/IM) responsibilities.

Developing risk maps, embedding a risk culture within the organisation and implementing an ERM framework are the top 3 activities of the risk manager. 43% of ERM (or ERM/IM) risk managers are involved in crisis management and business continuity planning, which are increasingly at the centre of organisations’ strategy to deal with cyber-attacks, terrorism and now the global spread of Covid-19.

The development of strategic activities by ERM risk managers observed in 2018 has globally stabilised on risk culture, strategy and risk appetite. However, the proportion of risk managers in charge of the alignment and integration of risk management as part of business strategy decreased from 75% to 67%.

Which of the following activities are under your responsibility?

1. Development of risk maps: risk identification, analysis, evaluation, prioritisation and reporting
2. Development, implementation, and assessment of risk culture across the organisation
3. Definition of the Enterprise Risk Management governance, framework, processes, and/or tools
4. Design and implementation of risk controls / prevention
5. Alignment and integration of Risk Management as part of business strategy
6. Definition of the risk appetite strategy / statement
8. Assistance to other functional areas in contract negotiation, project management, acquisitions and investments
9. Definition of compliance (management, framework, embedding and assurance)
10. Design and implementation of risk financing strategy and association solutions
11. Analysis of capital projects and delivering business plans
12. Other

Operational activities
Strategic activities
IM activities

IM risk managers’ scope of activities is well established. However, the survey highlights an increasing role in the definition of compliance (32% in 2018 against 40% today). 40% of IM risk managers are involved in crisis management and business continuity planning, showing the important role played by insurance in the mitigation strategies of organisations.

Activities under the IM risk manager responsibility in 2020

<table>
<thead>
<tr>
<th>Activities</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance policy management</td>
<td>89%</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Definition of the insurance management governance</td>
<td>79%</td>
<td>66%</td>
<td>79%</td>
</tr>
<tr>
<td>Claims handling</td>
<td>66%</td>
<td>40%</td>
<td>66%</td>
</tr>
<tr>
<td>Insurable loss prevention</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Development and embedding of business continuity management / emergency management / crisis management / incident response programmes and solutions</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Definition of compliance (management, framework, embedding and assurance)</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Gender breakdown by age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 30 years old</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>Between 31 and 35 years old</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>Between 36 and 45 years old</td>
<td>34%</td>
<td>66%</td>
</tr>
<tr>
<td>Between 46 and 55 years old</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Between 56 and 60 years old</td>
<td>29%</td>
<td>71%</td>
</tr>
<tr>
<td>More than 60 years old</td>
<td>16%</td>
<td>84%</td>
</tr>
</tbody>
</table>

What is your age?

- Between 36 and 45 years old: 12%
- Between 46 and 55 years old: 34%
- Between 56 and 60 years old: 30%
- More than 60 years old: 10%
- Less than 30 years old: 8%
- Between 31 and 35 years old: 5%

Professional experience in risk management

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>ERM</th>
<th>ERM/IM</th>
<th>IM</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 10 years</td>
<td>41%</td>
<td>20%</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Between 5 and 10 years</td>
<td>30%</td>
<td>14%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>30%</td>
<td>14%</td>
<td>16%</td>
<td>16%</td>
</tr>
</tbody>
</table>

The average proportion of women risk managers is unchanged with 32% in 2020 compared to 31% in 2018. The sectors where women are the least represented are sport, media and entertainment (1%), government (1%) and consumer goods (1%) and the ones where they are the most represented are manufacturing (10%) and banking and financial services (17%).

The youngest age group has the greatest proportion of women. Women represent 52% of risk managers under 30 years old, while they are only 16% among those more than 60 years old.

Risk management is still a profession for the experienced, with 64% between 36 and 55 but the average age reduced since 2016. Younger risk managers, those under 36, made up 17% of the respondents in 2020 compared to 15% in 2018.

The most experienced risk managers work in the IM and ERM/IM fields with respectively 68% and 66% of respondents having more than 10 years’ experience.

The ERM function experience level is more even.

A focus on education is presented in part IV of this report.
How did risk managers see risks in 2020 prior to the Covid-19 crisis?

Between 2018 and 2020, multiple events disrupted the European risk climate: economic and political developments, technological changes and growing environmental pressures among them. This was before Covid-19.

The survey asked risk managers to select and rank the major threats to their organisation’s growth prospects at different time horizons (12 months, 3 years and 10 years). The results are presented as follows:

- Top 5 short-term risks, compared below to previous surveys (2016 and 2018);
- Top 15 short-term risks, highlighting their evolution from the previous survey and the new risks identified;
- Two Top 3 risks: a medium-term and a long-term perspective.

The Covid-19 crisis heightens the importance of the top concerns of risk managers:

- There has been a spectacular increase in cyber-attacks exploiting the increased number of digital connections during the confinement and the potential vulnerabilities of people working from home.
- Uncertain economic growth was already in evidence before Covid-19. During the pandemic, many businesses stopped their operations or significantly reduced activity. European economies shrank during the first quarter with an economic recession predicted. 

Top 5 critical threats to the organisation’s growth prospects within the next 12 months

In the 2020 Top 5, two new threats reached the highest level of concern of risk managers: the availability of key skills and the data fraud or theft. The first draws attention to the difficulty of attracting, developing and retaining the skills required to adapt to new technologies and ways of working. The second highlights the threats related to the expansion of data management and use.

The Covid-19 crisis heightens the importance of the top concerns of risk managers:

- Economic conditions
- Cyber threats
- Uncertain economic growth
- Geopolitical uncertainty
- Over-regulation
- Competition
- Changing consumer behaviour
- Availability of key skills
- Data fraud or theft
- Over-regulation

Top 3 of the risks for the next 12 months by sector of activity

* Public sector is less representative as only 4% of respondents (refer to survey sample).
Top 15 critical threats within the 12 next months

This radar highlights 2 new risks in 2020:
- Extreme weather events
- Natural disaster

A CEO Perspective:
The 23rd CEOs survey which gathers the opinions of 1581 CEOs in 83 countries, shows that CEOs and risk managers have a common and increasing worry about climate change and environmental damage. There was a 25% increase in the number of CEOs “extremely concerned” about this subject between 2019 and 2020. Indeed, the green transition is becoming a major point of focus in Europe.

Top 3 critical threats within the next 3 years and next 10 years

This medium- and long-term risk ranking shows that the risk managers have 2 major concerns:
- In the medium term, digital transformation as a result of the speed of technological change and cyber threats, in a context of economic uncertainty;
- In the longer term, the transition towards a sustainable environment with a major accent on environmental damage, climate change and extreme weather events.

As such topics are prevalent, complex and transversal, ERM is diversifying risk mapping to address them through a specific risk assessment exercise. This highlights a trend away from compliance-led risk mapping to a resilience-led risk mapping, which the current global pandemic crisis is expected to amplify.

Risk mapping remains one of the most important activities on the risk manager’s agenda. Risk maps conducted at corporate level and for certain business units have increased, while the top down approach slightly decreased.

Top 3 risks within the next 3 years

- Cyber threats: 18%
- Speed of technological change: 18%
- Uncertain economic growth: 17%

Top 3 risks within the next 10 years

- Climate change and environmental damage: 17%
- Changing customer behaviour: 11%
- Extreme weather events: 10%

These broad issues also relate to changes in customer behaviour that 11% of risk managers see coming in the next 10 years.

To what extent does your organisation prioritise risks by mapping them?

<table>
<thead>
<tr>
<th>Top down</th>
<th>Corporate level</th>
<th>Certain business units</th>
<th>Strategic risks</th>
<th>Corruption risks</th>
<th>Security risks</th>
<th>Data privacy risks</th>
<th>CSR risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>34%</td>
<td>29%</td>
<td>23%</td>
<td>14%</td>
<td>12%</td>
<td>11%</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>56%</td>
<td>44%</td>
<td>77%</td>
<td>86%</td>
<td>88%</td>
<td>89%</td>
<td>82%</td>
<td>85%</td>
</tr>
</tbody>
</table>
Part I: The risk manager’s growing role in the digital transformation

While the risk management function is moving forward with its own digital transformation, risk managers are also involved and more recognised as part of their company’s digital transformation.

Innovative risk management practices continue to develop

The use of innovative technologies such as data analysis, data visualisation, process automation and artificial intelligence (AI) is increasing. Such innovations make it possible for risk managers to manipulate large amounts of data, perform more analysis with larger samples and bring out increasingly useful information. Therefore, they can better appreciate how risks are interconnected and be more proactive and predictive.

The financial services sector is leading this digital transformation: 79% of respondents in this sector use at least one innovative technology compared to 64% in other services and 62% in industry.

Yet, digital transformation is not universal. So far, 34% of the respondents bring none of the 4 technologies listed into their daily work.

<table>
<thead>
<tr>
<th>Use of data analysis, data visualisation, process automation and artificial intelligence by sector of activity (1/2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the four innovative technologies used</td>
</tr>
<tr>
<td>All</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>34%</td>
</tr>
<tr>
<td>36%</td>
</tr>
<tr>
<td>29%</td>
</tr>
<tr>
<td>27%</td>
</tr>
<tr>
<td>36%</td>
</tr>
</tbody>
</table>

* Public sector is less representative as only 4% of respondents (refer to survey sample).

<table>
<thead>
<tr>
<th>Use of data analysis, data visualisation, process automation and artificial intelligence by sector of activity (2/2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data analysis technologies</td>
</tr>
<tr>
<td>All</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>36%</td>
</tr>
<tr>
<td>34%</td>
</tr>
<tr>
<td>43%</td>
</tr>
<tr>
<td>30%</td>
</tr>
<tr>
<td>36%</td>
</tr>
<tr>
<td>15%</td>
</tr>
</tbody>
</table>

* Public sector is less representative as only 4% of respondents (refer to survey sample).
In 2020, the main new technology used by risk managers to perform their risk / insurance activities is data analysis with 53%. This figure increased by 9% compared to 2018.

54% of risk managers have data analysis skills within their teams. In 21% of cases, the company calls on an external service provider to manage this task. For 17%, the analysis is carried out by the central corporate team support, and for 7%, the IT department oversees this new technology.

Data visualisation is the second most used technology with 35% of respondents. This is an increase of 20% compared to 2018. In Northern and Western Europe, 35% of the risk managers use data visualisation to perform their risk / insurance activities compared to 46% in Central and Eastern Europe.

Data visualisation is mostly used for the following purposes:
1. Continuous monitoring using risk indicators dashboard (60%)
2. Interactive risk mapping visualisation (45%)
3. Continuous monitoring using action plan dashboard (28%)

Process automation is used by 28% of the respondents, around 30% in Western and Central and Eastern Europe and 19% in Northern Europe.

48% of risk managers have process automation skills within their teams. For 20% of them, the analysis is carried out by the central corporate team support, for 16%, the IT department oversees this new technology, and for 16% the company calls on an external service provider to manage this aspect.

8% of risk managers are now using AI technologies and this figure is similar in all the geographical areas in Europe. The AI solutions used by risk managers and their teams are the following:
1. Algorithms (63%)
2. Machine learning (54%)
3. Text mining (15%)
4. Speech recognition (12%)
5. Visual recognition or computer vision techniques (12%)
6. Natural language processing (2%)

Most risk managers continue to use locally based IT tools, such as software for governance, risk management and compliance. The main applications are reporting activities such as risk registers, mapping and dashboards. Even if these uses still predominate, newer technologies such as blockchain, Internet of things and drones, are growing.

Risk management contributes to the digital transformation of organisations

As organisations face pressure to innovate, a considerable number of risk managers are helping them to manage risk exposures from new initiatives before adoption and to strike the right balance between risk and reward.

The proportion of risk managers helping their organisation by identifying and assessing the risks prior to adoption of new technologies is stable (37% in 2018 and in 2020). Slightly more risk managers help with the identification and assessment of emerging technologies used by the business (39% in 2020 vs 36% in 2018)

FERMA report: Artificial Intelligence (AI) Applied to Risk Management

This paper aims to guide risk managers on applying AI from a basic understanding to developing their own strategy on the implementation of AI. It includes an action guide and a template for risk managers to develop their own AI risk management roadmap.

Cyber threats are the first concern for risk managers in 2020, increasing by 30% since 2018. The 2018 FERMA Survey showed that digital risks, especially cyber risks and data protection, were already a top priority for risk managers. In the 2020 survey, they are the top concern in all sectors. Data fraud / theft entered the top 5 this year, while the risk managers interviewed ranked risks from the speed of technological change at number 7.

"Digital transformation is taking place in all companies across all sectors of the economy. The Covid-19 crisis has emphasised and extended this development to an unexpected level from which there will be no turning back. More than ever, risk managers have a leading role in promoting a risk approach to anticipating scenarios of exposure to cyber risks when this crisis is overcome."

Philippe Cotelle, Head of Insurance Risk Management at Airbus Defence and Space and FERMA Board member

**Focus on cyber threats**

To help manage those risks, risk managers maintain a stable and high level of collaboration with IT (43% have close collaboration and 6% have the activity within their team) and information security teams (45% of them have close collaboration and 10% have the activity within their team).

The detail and level of interactions between risk managers and other functions is described in part V.
Part II: The risk manager’s contribution to sustainability

An encouraging 40% of respondents say they are playing or are planning to play a specific role regarding environmental, social and governance-related risks. ESG issues are closely linked with the transition to sustainability in the European Green Deal.

The chart below provides insights on the 5 greatest challenges for risk managers in integrating ESG into the risk management process.

The omission of opportunities, the third obstacle, may indicate that many organisations treat ESG predominantly as a compliance task to meet increased non-financial disclosure obligations and CSR requirements. As such, ESG may not come within the scope of the risk managers’ activities.

The fourth challenge seems to confirm this finding and indicates the need for risk managers to have a closer relationship with the CSR department in order to play a wider role. Currently, only 25% have a close collaboration with the CSR department or have the CSR function within their scope of activity (35% in 2018). 29% of the risk managers interviewed have no collaboration with this department (24% in 2018).

In part V, the interactions between risk managers and the other functions are highlighted. They demonstrate that those with CSR are too weak to enable close working and sharing knowledge on such major transformation.

Environmental risk is one of top concerns for European risk managers for the years coming, in line with the Global Risks Report 2020 from the World Economic Forum and The 23rd PwC CEOs Survey. The 2 new risks entering the Top 15 identified by the 2020 FERMA survey are environmental: extreme weather events and natural disaster.

Yet moving to a sustainable environment will bring many challenges and drive actions. European Sustainable Finance policies require financial services companies to assess sustainability risks. In the context of the Green New Deal, risk managers from all business sectors can be involved in managing the potential financial consequences of such risks, but also in taking advantage of opportunities generated by the transformation to sustainability.

Furthermore, the Covid-19 crisis demonstrates the need to consider and better address systemic risks and notably climate-related risks (identified this year as top long-term threats by risk managers).“Managing sustainability is not limited to mitigating the financial impact of natural catastrophes. Risk managers can also play a role in developing sustainability within their organisations.” FERMA

The last challenge faced by the respondents is the lack of support from the Board and top management. The transition from simple awareness of the need for green transformation to effective business decisions is still ongoing with different levels of maturity among organisations.

These challenges are evidence that when a threat is becoming major and strategic, companies should adjust their internal governance to allow appropriate ownership and management of the risks. Additionally, while risk managers are involved in strategic subjects that have implications in the short term, such as digital transformation (refer to part II), they may be less involved in issues that top management regards as long term.

However, as the pandemic crisis turns into a severe economic, it may affect the ability to finance the environmental transition.
Part III: The risk manager facing hardening insurance market conditions

Tougher insurance market conditions are risk managers’ top concern

<table>
<thead>
<tr>
<th>Risk managers’ concerns regarding the four following insurance market topics</th>
<th>Concerned</th>
<th>Not Concerned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limitations and exclusions on emerging specific risks</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Change in market conditions</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>Concentration of insurance</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>New regulations</td>
<td>59%</td>
<td>41%</td>
</tr>
</tbody>
</table>

Risk managers with an IM profile regard limits and exclusions of emerging / specific risks in insurance contracts (90%) and change in market conditions (88%) as their main concerns about the insurance market.

The market was already hardening before the pandemic. Premiums had increased while coverages were contracting, with the Covid-19 outbreak adding even more pressure. Insurers are expected to add more restrictions and exclusions in property and casualty insurance policies. Some of major risks discussed in this report are likely to be affected by these tougher conditions.

Additionally, recent mergers and acquisitions among insurers and brokers are concerning IM profile risk managers about the concentration of the market and potentially reduced choice.

In this context, risk managers will focus on two main changes in relation to insurance programmes:

- Strengthen loss prevention activity (60%): highest increase in loss prevention activity since 2014. This demonstrates a desire for reduction of the company’s exposure and balance sheet protection;
- Negotiate long-term agreements or roll-overs (53%), which suggests that risk managers expect further changes in pricing levels and wish to invest in a long-term relationship with their insurers.

The analysis of the risks confronting European companies and the hardening insurance market highlight the growing concerns of risk managers regarding emerging risks and their need for viable solutions.

Will strengthen their loss prevention activity

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>43%</td>
</tr>
<tr>
<td>2016</td>
<td>54%</td>
</tr>
<tr>
<td>2018</td>
<td>44%</td>
</tr>
<tr>
<td>2020</td>
<td>60%</td>
</tr>
</tbody>
</table>

Intend to negotiate long-term or roll-over agreements with their insurers

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>50%</td>
</tr>
<tr>
<td>2016</td>
<td>43%</td>
</tr>
<tr>
<td>2018</td>
<td>53%</td>
</tr>
<tr>
<td>2020</td>
<td>52%</td>
</tr>
</tbody>
</table>

Over the next 2 years, what will be your strategy with regard to risks which are difficult to place on the insurance market?

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk retention</td>
<td>76%</td>
</tr>
<tr>
<td>Use alternative risk transfer vehicles</td>
<td>46%</td>
</tr>
<tr>
<td>Use an existing captive</td>
<td>27%</td>
</tr>
<tr>
<td>Create a captive insurance / re-insurance company</td>
<td>16%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
</tr>
</tbody>
</table>
While risk retention and alternative risk transfer vehicles are seen as the main methods for dealing with a shortage of capacity for emerging / specific risks, the use of captives is the strategy that increased the most in 2 years. In 2018, 15% of respondents were considering using captives. Now 43% are considering this solution. Indeed, in 2020:

- 27% of risk managers say they will continue to use an existing captive by 2022 for difficult to place risks (1% in 2018)
- 16% plan to create a captive insurance / re-insurance company (14% in 2018)

This finding demonstrates the attractiveness of captives when risks are difficult or very expensive to place on the insurance market. It reinforces FERMA’s emphasis on the value of captives as a genuine risk management tool for organisations. 37% of risk managers continue to show confidence in captives (use a captive dedicated to their company or share a captive with other organisations).

In 2018, 15% of respondents were considering using captives. Now 43% are considering this solution. Indeed, in 2020:

- 27% of risk managers say they will continue to use an existing captive by 2022 for difficult to place risks (1% in 2018)
- 16% plan to create a captive insurance / re-insurance company (14% in 2018)

The captive, a collaboration between ERM and insurance management?

A captive is an efficient risk management tool that can bring together ERM and insurance management methodologies, especially in the need for a clear understanding of risk exposure to drive risk and insurance management decision-making. In a hard insurance market, risk managers may have to make sensitive decisions about financing more risk with a captive because of the market’s underwriting restrictions or pricing.

Hardening insurance market conditions should put ERM/IM synergies high on any organisation’s agenda, especially for all questions around the use of captive companies. How much self-insurance can we take? How do we differentiate a “must-have” from a “nice-to-have” cover? What is the actual exposure and how does it match the insurance market’s price for it?

As ERM assesses the exposure and allows the organisation to set its risk appetite, it is crucial for ERM and IM to efficiently liaise and assess these questions holistically. In doing so, they can provide their entire organisation with a way to expand and mutualise group risks, build relevant experience data, leverage discussions with traditional insurance markets and offer added value to customers.

FERMA Perspectives: Captives in a Post-BEPS World explains how multi-national organisations can use captives effectively for their risk management programme in a modern regulatory environment.
Insurance management purchasing contrasted

The limits of insurance cover that organisations buy can be different from the perceived risks.

Despite the high ranking of cyber threats and data fraud and theft in the top 5 risks for the next 12 months, 35% of respondents bought no stand-alone cyber coverage and stand-alone cyber risks policies had the least coverage for limits above €50 million.

For D&O more than half (56%) purchase limits of €50 million or more.

“As a result of the impact of COVID-19, we expect organisations will look for higher limits for their D&O coverage.” FERMA

“Insurance has been an efficient tool to finance the consequences of risks over the last 20 years, but the hardening market makes it less cost-effective for organisations. The shortage of insurance capacity for some exposures will also push risk and insurance managers to explore other ways for financing risks.

Within this context, the use of captive (re)insurance companies will undoubtedly rise. Captives allow companies to buffer insurance market conditions thanks to a risk financing based on the technical premium for low- to medium-impact risks. The pricing consequently gives more weight to the unique risk performance of the organisation than the insurance market typically does.”

Laurent Nihoul, General Manager – Group Head of Insurance, ArcelorMittal, Group Finance and FERMA Board member
Part IV: The risk manager’s education and the increasing importance of certification

Qualification in risk management

Risk managers confirm the added value of a specific qualification and recognition of the importance of certification.

Two-thirds of risk managers have a qualification in risk or insurance management: 67% have a university or business school degree and 50% have a professional education. 20% have both: a university or business school degree and professional education.

The proportion of risk managers having a professional education diploma is similar across Europe. The proportion of risk managers with a university or business school degree is greater in Western Europe with 45% than in Northern Europe where it drops to 28%.

Certification

This figure is broadly in line with 2018, where 80% of respondents acknowledged the importance of certification.

Other certifications mentioned include IRM, GARP, ARM and CEFAR.

FERMA European Risk Manager Report - 2020

Which certification risk managers have or plan to have by age

The age group between 36 and 55 years old represents 66% of the sample. This indicates that majority of risk managers who already have some experience are interested in certification.

FERMA Certification

Another Risk Management Certification

3 IRM: Institute of Risk Management; GARP: Global Association of Risk Professionals; ARM: Associate in Risk Management; CEFAR: “Certificat de formation en assurance et gestion des risques”
**FERMA rimap certification** provides an independent confirmation of risk management professional competences and experience. It is a European standard developed by European risk managers and recognised by FERMA’s 21 risk management member associations. A continuous dynamic learning path awards CPD (Continuous Professional Development) points for participating in FERMA licensed events.

Sebastian Bregning, Senior Risk Manager, Danske Bank A/S – DENMARK

“Overall, rimap is very relevant and valuable because it gives risk managers a common reference point when we talk to each other and even with people in the insurance industry. It is a good benchmark from which to drive the risk management agenda across the organisation and industry. There is increasing demand from risk managers to create value and that value is not limited to savings on the insurance budget. Rimap provides a vocabulary and framework so that we can be efficient in communicating our intentions and expectations.”

Frederic Lycops, Corporate Risk Manager, Recticel – BELGIUM

“I see rimap as an investment, not only in my career and my future as a risk professional but also as an investment for the company I work for. It is proof to internal and external stakeholders that people who work within risk management in the company have a certain standard and knowledge of principles of risk management.”

Nick Purkis, Senior Risk and Insurance Manager, LeasePlan – THE NETHERLANDS

“It’s that really nice balance of Enterprise Risk and Insurance Risk and it’s quite unique in the qualifications structure. This brings together two areas that sit together really well but are usually not associated with the course.”

Risk managers who recognise the importance of certification rank the internal recognition it provides as its greatest benefit. This demonstrates the key challenge for the profession to demonstrate its added-value within the organisation.

The second advantage of the certification is the development of skills, such as the application of innovative technologies. IM risk managers learn to deal with new risks, while ERM profile risk managers expand their understanding of a changing insurance market.

What are the 5 most important advantages of a recognised certification in risk management?

<table>
<thead>
<tr>
<th>Rank</th>
<th>Advantage</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Improves internal recognition of the function and gains credibility from stakeholders</td>
<td>79%</td>
</tr>
<tr>
<td>2nd</td>
<td>Helps develop operational skills</td>
<td>77%</td>
</tr>
<tr>
<td>3rd</td>
<td>Improves employability</td>
<td>58%</td>
</tr>
<tr>
<td>4th</td>
<td>Helps develop your professional network</td>
<td>55%</td>
</tr>
<tr>
<td>5th</td>
<td>Improves the remuneration</td>
<td>31%</td>
</tr>
</tbody>
</table>

“FERMA, within its vision of a world where risk management is embedded in the business model and culture of organisations, created rimap Certification as a continuous and dynamic learning path for risk managers’ educational needs. After 4 years, rimap has been established as a prestigious professional risk management qualification that brings significant value to its holders.

Senior risk managers recognise the importance of being up-to-date with the evolving risk landscape. Rimap also allows them to deepen the strategic aspects of their role, relationships with other functions and their reports to the C-suite. For young people who want to begin a career as risk managers, rimap adds value by improving their employability and remuneration and developing a professional network.”

Isabel Martinez Torre-Enciso, Vice President CEU GROUP, Vice Dean at the Autonomous University of Madrid and FERMA Board member
Part V: The risk manager’s presence and interaction within the organisation

Levels of interaction with the 3 lines of defence

Different levels of interaction between various functions continue:

- First rank partners – with whom the risk management function has a regular or very close relationship, based on a clear mandate;
- Second rank partners – with whom the risk management function has a more distant relationship and occasional collaboration;
- Third rank partners – with whom relationships can be improved, as there is little or no relationship or involvement.

Connections and collaboration with all lines of defence are essentially stable. Compared to 2018, slightly more risk managers think that the development of other risk-related functions (compliance, data, cybersecurity, safety and security, etc.) has no impact on their role (19% in 2018 against 22% today). At the same time, 13% of respondents indicate that the risk manager is losing control over specific areas of risk, little changed since 2018.

Risk managers in Europe have well-established relationships with operations, finance, legal and IT. The proportion regularly or occasionally interacting with them has stabilised at a high level (around 85%).

More generally on average, 75% of risk managers have regular or occasional relationships with the first line of defence.

*Finance includes first line activities as accounting and reporting as well as financial control which is part of the second line.
Internal audit remains an important partner for the risk manager to provide assurance of the effectiveness of the mitigation plans.

The risk manager’s presence at a strategic level of the organisation

The risk management function is usually located at head office level. This situation not only enables risk managers to have a global vision of the whole organisation, but also to have access and interaction with other functions as required, and with most of the top management.

Three-quarters of risk managers assess strategic risks, unchanged since 2018, but some have assumed significantly more strategic responsibilities:

- 74% of risk managers assess risks that could affect the relevance and viability of their organisation’s strategy and objectives (76% in 2018).
- 60% of risk managers assess risks related to the different strategies considered by their organisation during its strategy definition (47% in 2018).
- 59% of risk managers assess risks related to the non-alignment of their organisation’s strategy with its mission, vision and core values (41% in 2018).

A reinforcement of the relationships with ethics and compliance and information security was expected, as a result of regulations such as the Non-Financial Reporting Directive and the General Data Protection Regulation (GDPR). However, this does not emerge from the survey.

Risk managers saying that they have occasional collaboration with these functions is unchanged, but regular and close collaboration appears to have diminished.

The second line of defence: close relationships continue

The third line of defence: relationship with internal audit is strong
In 2020, only 8% of the risk managers say that there is no mechanism in place to formally report about risk management, and the same proportion say that they do not have any contact with the CEO. 44% of the respondents can contact the CEO directly and 28% indirectly through their superior.

There is no significant difference between ERM and IM risk managers. However, 64% of ERM managers formally present to the Board of Directors and/or top management several times a year while it is only 22% of IM managers. Overall, ERM profiles are more represented on top level committees, and significantly more on audit committees, than IM profiles.

<table>
<thead>
<tr>
<th>ERM managers represented on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Committee: 60%</td>
</tr>
<tr>
<td>Executive Committee: 47%</td>
</tr>
<tr>
<td>Board Committee: 39%</td>
</tr>
<tr>
<td>Audit Committee: 48%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IM managers represented on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Committee: 51%</td>
</tr>
<tr>
<td>Executive Committee: 29%</td>
</tr>
<tr>
<td>Board Committee: 27%</td>
</tr>
<tr>
<td>Audit Committee: 25%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ERM/IM managers represented on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Committee: 44%</td>
</tr>
<tr>
<td>Executive Committee: 35%</td>
</tr>
<tr>
<td>Board Committee: 34%</td>
</tr>
<tr>
<td>Audit Committee: 32%</td>
</tr>
</tbody>
</table>