EMBEDDING SUSTAINABILITY INTO INSURER’S DIGITAL TRANSFORMATION

Abstract

The insurance industry and climate change agenda are intertwined. Given insurers serve a triple role in the society as insurers, investors and risk managers, they are critical to enacting change. The paper thus addresses the opportunity spaces that insurers should focus on with an aim to truly make a substantial impact on the climate change curve. The paper further highlights the industry best practices enabling other insurers & organizations to benchmark their own respective journeys.
**Introduction**

The insurance industry is at the forefront against climate change. An exponential rise in natural catastrophes has shot insurance payouts and upended traditional risk models. Moreover, climate risk has a combinatorial impact, as it can affect a broad spectrum of stakeholders, from agricultural communities to international supply chains. As a consequence, insurance leaders have become some of the main promoters of the UN’s Sustainable Development Goals (SDGs) and fierce actors that intend to curb climate change and build resilient communities. Industry leaders have not only developed a strong intent, but they are also uniquely positioned to affect action given their triple role in society as insurers, investors and risk managers. Additionally, heightened awareness permeates society which increases market and regulatory pressure on actors to improve their Environmental, Social and Governance (ESG) practices. Insurers must now navigate a complex landscape. This includes increased regulatory pressure both on their operations and investments, shifting consumer preferences, materiality risk from climate change and a great deal of uncertainty.

**Opportunity Spaces for Insurers**

As a result, insurers can shape sustainable development and bend climate change by focusing on four opportunity spaces: ESG operations, ESG asset management, risk modeling & underwriting, and sustainable insurance offering.

*Insurers will develop a sustainability-first culture by initially focusing on their core operations*

1. **ESG Operations: How do you run the company?**
   - Assess, measure and monitor the company’s progress in managing ESG issues and regularly disclose this information publicly.

2. **ESG Asset Management: How do you invest?**
   - Steer the transition to sustainability by investing, divesting and managing financial assets according to ESG standards.

   - Refine modeling to include climate-change effects, natural catastrophes and attempt to close the insurance gap affecting capital adequacy decision-making.

4. **Sustainable Insurance Offering: What do you offer?**
   - Create climate-aligned behavioral changes in the customers, reduce climate risk, contribute to ESGs, develop innovative solutions and charm new niche segments.
Navigating this environment is not news for insurers. Leaders in the industry have already taken actions to address this convoluted landscape across all the opportunity spaces. These spaces also enable benchmarking progress for the industry and amongst key players. While looking at ESG operations, the first step is to assess whether they are publishing an ESG report, and whether their climate efforts are part of their main strategy. AXA is a sound example who has been publishing climate reports since 2019 and has climate change as one of the pillars of their Driving Progress 2023 strategy. Allianz has shown the most foresight by commencing publishing since 2009. There’s an opportunity to dive deeper and assess their decarbonization commitments, real state footprint, and leadership on diversity and gender issues. In the future, these reports will become increasingly sophisticated and progressively regulated, thus standardization is bound to arise. Regardless, we can already foresee that there’s a mismatch happening today, because even though 90% of the S&P firms published ESG reports in 2019 (up from 20% in 2011), only 16% have a reference to ESG factor on their fillings. We can analyze reporting compliance to different ESG frameworks to assess each company, such as the CDP questionnaire (65% compliance in the S&P), GRI (50%), UN SDGs (36%), SASB (25%) or TCFD (16%). The TCFD or Taskforce on Climate-related Financial Disclosures is a great and robust example where some insurers such as Allianz, AXA, and Lloyd’s are already leading the way by actively participating in the insurance Task Force.

Reports are only one side of the coin, on the flip side we find investors who continue to embed ESG criteria to their portfolios and are quick to divest from companies who have poor or unclear metrics. Moving forward, ESG investing will continue to focus on the materiality impact of investments as both quality and quantity of available data continue to increase. Financial disclosures that asset managers make will hold the key to assess how mature each company is on their journey. Allianz GI reported € 582 Bn AuM, 205.5 of those considered sustainable investing and growing every year and earning an A+ grade by the Principles of Responsible Investment association.

For climate risk & catastrophe modeling, re/insurers and P&C insurers are leading the industry given their expertise and position in the value chain. We can understand how robust their intent is based on their climate-related offering and efforts to address the insurance gap. The insurance gap is an increasing concern for the society as a whole. Today around 50% of weather-related catastrophes is uninsured, leaving governments, companies, and people to bear the burden of the catastrophe. In 2021, Aon launched a hurricane risk model specific to Florida, USA, enabling new data sources for the model. Insurers today don’t just worry about increasing their underwritings, but they also implement restrictions to insure certain assets and companies which highlights consistency around their overall climate strategy.

When it comes to sustainable product offering, insurers generally have more leeway to explore new solutions. Insurance is a key component of the total cost of ownership for different assets and, as a consequence, insurers can enable and incentivize low carbon choices. Furthermore, insurers can nudge customer behavior towards climate aligned decision such as repairing or using only low-impact providers. Regardless of the approach insurers opt for, they must understand that just “sustainability” won’t ensure customer demand, and innovation methodologies to align the product market-fit still remains of essence to drive traction.
Benchmarking a sustainability journey

Insurers can self-assess their journey into sustainability with these non-exhaustive best practices across the four opportunity spaces

<table>
<thead>
<tr>
<th>ESG Operations</th>
<th>ESG Asset Management</th>
<th>Risk Modeling &amp; Underwriting</th>
<th>Sustainable Product Offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2 emissions from direct operations</td>
<td>Divest from carbon intensive assets</td>
<td>Proactively address the insurance gap</td>
<td>Develop preventive and AI-driven products for machinery maintenance or health insurance</td>
</tr>
<tr>
<td>Analyze resource consumption, focusing on real state footprint</td>
<td>Disclose the warming potential of portfolio</td>
<td>Include novel data sources to climate models</td>
<td>Embed sustainability into replace or repair claim management process</td>
</tr>
<tr>
<td>Review Impact from supply chain</td>
<td>Align investments with diversity index</td>
<td>Establish underwriting restrictions to carbon heavy assets</td>
<td>Nudge customer behavior through pricing schemes to reduce pollution</td>
</tr>
<tr>
<td>Develop ESG reports and embed into corporate strategy</td>
<td>Invest according to the UN’s SDGs</td>
<td>Expand climate modeling to include secondary perils</td>
<td>Offer automated parametric insurance solutions</td>
</tr>
<tr>
<td>Report according to TCDF standards and include in financial reports</td>
<td>Assess investment to PRI score or other tools</td>
<td>Develop climate models for hyper-localized products</td>
<td>Develop UXs that inform customers of their footprint and impact</td>
</tr>
</tbody>
</table>
How to enable sustainability-first insurers?

With a sound understanding of where it is that insurers should play, the key question becomes how to win. We know for sure that there’s no silver bullet to eliminate climate change and treating ESG topics as a byproduct of a firm's activity will only take us to a business-as-usual scenario. Consequently, companies shouldn’t develop sustainability in silos, but rather integrate it to the core of the firm and into every microtransaction. As insurers continue to deepen their digital transformation journeys, sustainability must be a core component of it, with a roadmap that embeds sustainability into the insurer's strategy. In a holistic approach towards sustainability, insurers will have to develop new frameworks and infrastructure to undergo cultural, financial, data and technology change. In a sustainability-first firm, cutting-edge data and technology capabilities will be crucial.

Combining digital and sustainability transformation ensures that the insurer’s digital density will increase as they gather raw data from wide ranging sources such as satellites, remote patient monitoring devices or buildings waste management solutions. The Internet of Things (IoT) trend is constantly creating new data sources that insurers can leverage to understand their operations better as well as the people and goods that are being insured. Moreover, unstructured and siloed data can be a source of untapped value thanks to a range of new digital technologies such as natural language processing (NLP). In the health insurance industry, AI-driven remote patient monitoring thanks to connected medical devices and gamification platforms is already a key trend to promote preventive behavior and the wellbeing of policy holders as with Bupa’s BluaU digital insurance. In P&C, as Usage-based Insurance (UBI) increases relevance and penetration, environmental data layers such as CO2 emissions should be added to products to nudge customer behavior and potentially reward it. Similarly, as Claim Management becomes increasingly automated, automation should go hand in hand with more sustainable repair or replace alternatives to enable a more circular and resilient economy.

Then, to extract the full value of the data, insurers must develop sophisticated analytics with AI/ML that can be used to model climate-related risks with more granularity in hyper-localized fashion. The challenge is to aggregate and harmonize the data to enable decision making for the different stakeholders of the firm: Its employees, investors and clients. It is precisely the regulatory and standardization trend in reporting that will test an insurer’s ability to integrate digital and sustainability transformation. In order to scale digitally in an agile and fully automated way, insurers must deploy next gen technology that is integrated across the organization. As with all transformations, navigating this change will affect every aspect of a firm’s capabilities with change management driving the journey.

At Infosys, we emphasize that sustainability is a journey. In 2011 we committed to the carbon neutrality goals at the UN, and in 2020 we achieved this goal 30 years ahead of the Paris Agreement. Our engineering and consulting teams developed tech-driven best practices and built holistic capabilities to create a sustainability-first business practice. It has enabled us to not just publish yearly ESG, but develop a holistic ESG 2030 vision.

Today, the question no longer is whether insurers should integrate sustainability, rather on how they should do it. At this moment, the only factor at play is the speed of change. The degree of awareness of this fact and the set of consistent actions taken by insurers is what separates leaders from laggards. In many ways, an insurer’s approach to digital transformation was very similar until Covid-19 upended every activity. With climate change, we are poised to witness a gradual increase of weather induced catastrophes across the world. Insurers are not just bearing the consequences, but are the best suited to sound the alarm for the world.
Insurers need proprietary frameworks

As insurers mature their sustainability journey, self-assessment will become a common practice across the industry. Insurers can access rating tools such as MSCI or Sustainalytics for a high-level understanding of their current perception by the market. At this moment, the shortcomings for rating agencies is that there’s no agreement over the measuring criteria. Moreover, this approach will grant a generalist view of the firm, not an insurance specific view. Considering that it is clear that the insurance industry is in a unique relation with climate change, insurers require an insurance centric solution. A one-stop-shop solution that integrates all data across the opportunity spaces and enables firms to self-assess regularly and keep themselves in check.
References

1. Sustainability in Insurance | PwC Switzerland
2. The role of insurance in sustainable economic and social development | PwC
5. Insuring the Climate Transition: Enhancing the insurance industry’s assessment of climate change futures – UNEP Finance Initiative & Principles for Sustainable Insurance
6. The heat is on: Insurability and Resilience in a changing climate - CRO Forum
7. Investment governance and the integration of environmental, social and governance factors – OECD
9. Transition risk framework: Managing the impacts of the low carbon transition on infrastructure investments – University of Cambridge
10. ESG Investing and the challenge of integrating reliable ESG data
11. How the insurance industry can boldly shape a more sustainable future | EY - Global
12. Sustainability in Insurance: Weighing Possibilities and Responsibilities | HCL Blogs (hcltech.com)
13. Confronting the cost of catastrophe | Swiss Re
14. PSF_Ch11_insurance_2019.pdf (rsm.nl)
15. UK based insurance provider AVIVA has launched an offer to support sustainable energy providers in project financing and risk coverage.
16. Credit Agricole has launched an offer for sustainable farmers with exclusive warranties to prevent or better compensate weather-caused losses.
17. Sustainable Insurance (capgemini.com)
18. AXA2020_RAPPORTCLIMAT_V4.indd (axa-contento-118412.eu)
19. Public sector - AXA Climate | Expertise
20. mktresilience_2performance-insurance-solutions-for-breakthrough-technologies_axa-xl_re.pdf (axaxl.com)
23. Catastrophe modelling and climate change (lloyds.com)
About the Authors

Guillermo Borthwick Alvarez
A former strategy consultant with a JD in business law currently pursuing his MBA at the university of IESE.

Dr. Hema Prem Rainaa, PhD
Vice President of Insurance Europe and a leader in digital transformation, operational efficiency and innovation co-creation.