
Whitepaper

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Transforming Catastrophic Claims Management

A Use Case of Hyperautomated Claims Transformation



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Overview

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Catastrophic events can cause significant losses, leaving individuals and communities devastated. Insurers often struggle to efficiently handle the influx of claims caused by these natural disasters, such as hurricanes, tornadoes, wildfires, and floods. The sheer volume of claims and limited resources can lead to delays, inaccurate reporting, and operational inefficiencies in catastrophic claims management. Such challenges only add to the stress and anxiety experienced by those affected, further hindering their recovery efforts. Additionally, technological solutions sometimes overlook the importance of human factors, such as empathy and personalized support, which are crucial during these challenging times. Emerging technologies like Artificial Intelligence (AI), Machine Learning (ML), and Robotic Process Automation (RPA) can help insurers automate manual tasks involved in processing claims, such as claims intake, claims triaging based on adjuster's experience, and claims to report reinsurer for shared risk and liability; IoT devices can provide insurers with real-time data on catastrophes, enabling them to assess damage, estimate losses, and process claims more efficiently. Drones can quickly assess damage in remote or human-inaccessible regions and create sufficient reserves for the potential future liability against the insurance policies. This can help reduce the time it takes to process claims, allowing insurers to handle a larger volume of claims more efficiently.

Technologies like AI, ML, RPA, and IoT offer potential solutions, but their implementation presents its own set of challenges. Integrating disparate systems, end-to-end automated workflow, and straight-through processing (STP)s are complex tasks that need careful consideration.

This whitepaper recognizes the problem insurers face in managing catastrophic claims efficiently and addresses it comprehensively. By presenting a solution that combines the power of technology with a human-centric approach, insurers can streamline the claims process, reduce loss costs, and minimize reinsurance claims leakage.

Common Roadblocks in Catastrophe Claims Management

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The catastrophe claims management process can be complex and time-consuming, leading to inefficiencies that can significantly delay claims resolution for policyholders. Some common inefficiencies in the catastrophe claims process include:

- **Inadequate Claim System:** Insurers may not be adequately prepared to handle a sudden surge of claims during a catastrophe, overwhelming their tech systems and causing system outages and processing delays.
- **Lack of Communication:** Insurers face communication challenges due to the sheer magnitude of the loss during a catastrophe, mainly when multiple parties are involved. Insurers may need help communicating effectively with policyholders, reinsurers, and stakeholders such as medical teams, leading to delays in the claim settlements.
- **Complex Claim Handling:** For catastrophe-prone areas, insurers usually have reinsurance contracts. This can make claims settlement more complex and result in delays and mistrust from policyholders, which may cause a loss in repeat business.
- **Limited Skilled Resources:** Insurers may face resource shortages to handle a high volume of claims during a catastrophe, leading to delays in adjudication and settlement.
- **Manual Claims Processing:** Catastrophic events cause a large volume of claims, which can overwhelm insurers using traditional claims intake and settlement process. This can increase claims-loss costs and expenses associated with scaling up IT infrastructure.
- **Disputes and Litigation:** Disputes and litigation related to catastrophe claims can be time-consuming and costly, further impeding the efficiency of the claims process.

However, technological advances offer new tools to help insurers manage catastrophe claims more effectively. One such solution is **Hyperautomation**.

Hyperautomation aims to create a fully automated environment where machines can perform tasks more efficiently and accurately, even those that typically require human intervention. By combining AI and ML algorithms for data analysis and decision-making, RPA for automating repetitive tasks, and technologies like natural language processing (NLP) and chatbots for improved communication and interaction with users, insurers can establish an end-to-end automation process that enhances efficiency.

How Hyperautomation Can Disrupt Catastrophic Claims Management

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Hyperautomation can address these challenges and optimize the catastrophic claims management process by:

- **Streamlining Claims Processing:** Automating tasks such as data collection, analysis, and decision-making enables quick analysis of large claim volumes, identifying patterns and trends for more accurate and informed decisions. These speed up the claims process, reduce errors and improve policyholders' overall claims experience.
- **Automating Data Collection and Analysis:** AI and ML algorithms automatically collect and analyze data related to the extent of the damage, the number of affected policyholders, and the resource requirement. This allows insurers to assess claims quickly and allocate resources/reserves as needed.
- **Enhancing Communication:** Hyperautomation improves communication between insurers, reinsurers, and policyholders. Chatbots and AI-powered tools provide real-time claim status updates and address policyholders' questions, reducing the need for manual transmission and speeding up the claims process. This fosters transparency and reduces disputes and delays.
- **Resource Allocation:** Hyperautomation facilitates more efficient resource allocation resources. By delegating rule-driven tasks based on AI feed, insurers can focus on complex tasks like fraud detection and investigation. This improves work quality, reduces errors and disputes, and ultimately improves overall efficiency.
- **Improving Decision Making:** AI and ML algorithms analyze data to make informed decisions regarding claims handling, coverage extent, and settlement amounts.
- **Handling Claims Efficiently:** RPA batches automate repetitive tasks in claims handling, such as claims intake, triaging, etc. This frees up claims adjusters to focus on more complex tasks such as coverage evaluation and settlement determination.

Use Case: Handling Catastrophic Claims Using Hyperautomation

Suppose XYZ insurance carrier has 20,000 active policies in the region impacted by a catastrophe.

Step	Traditional Claims Process	Hyperautomated Claims Advantage
Claims Creation	Insureds report losses in huge numbers that can overwhelm the carriers, leading to system overload. Moreover, additional human and technical resources can add to the cost.	During a catastrophe, the system is triggered by government notification, auto-generating claims for insureds. Insurers receive messages with a link to add additional loss details, preventing system overload from user requests.
Claims Adjudication	Insurance carriers deploy a Claims Adjuster Team to assess loss in the impacted areas. The process can be time-consuming due to the large number of teams manually assessing the claims to make informed decisions.	Drones and IOT bots are deployed to assess the damage and capture images and videos in the impacted area. Additionally, cloud-native solutions are employed to store and analyze data, facilitating automated mapping of insured policies with loss details, leading to faster and more accurate decisions.
Communication	Insurers allocate additional resources during catastrophes to improve communication and visibility. However, the sheer volume of simultaneous claims often overwhelms their capacity, leading to cost increases and added complexity.	The latest generative AI chatbots are integrated with the claims systems to deliver a human-like experience for policyholders. This approach saves costs, eliminates human intervention, and ensures transparency with near-zero errors in handling complex catastrophic claims.
Vendor Integration	Insurers often experience delays in providing assistance and value-added services to the policyholders in their time of need.	The partners, vendors, and contractors can be easily integrated into the claims system to quickly deploy vendors configured to the insured's claims profile, saving time and improving customer experience.
Reserve Estimation	The Catastrophe Claim Adjuster team gathers information and assigns losses to each claim. Reserves are allocated for each claim, and the reinsurance firm is notified of their part of the ceded claims amount. However, this process is often time-consuming and inefficient due to the manual tasks involved.	Hyperautomation automates the reserve estimation using image processing and machine learning algorithms. This leads to precise reserve estimation and efficient notification to reinsurers for ceded claims, ensuring minimal human intervention and complete visibility, saving time for resources to settle claims.

At Hexaware, we actively work to transform the claims management process for insurers by adopting hyperautomation. Through our research following recent catastrophe events such as the 2023 US Tornadoes, 2023 Syria -Turkey Earthquakes, California Storms, and 2023 São Paulo Brazil Floods, we have delved into the current challenges in handling catastrophe claims by leveraging hyperautomation and IOT-based devices. We have developed a Proof of Concept (POC) that integrates IOT, hyperautomation, and the Duck Creek Claims system. The approach addresses the inefficiencies in current claims processing and presents an entirely new way of handling catastrophic claims.

Hexaware's Solution for
Catastrophe Claims Management
with Duck Creek

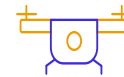
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Our POC for catastrophic claims management solution is developed by a team of experts at Hexaware to transform the end-to-end claims lifecycle of catastrophe claims using automation and IoT-based devices integrated with Duck Creek workflow. The aim is to make the process more seamless, tech-enabled, transparent, and operationally efficient.

Technology used:



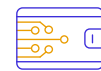
Internet of Things (IoT)



Drones



Image Processing & Machine Learning



Digital Wallets



End-to-End Dashboard Monitoring



Anywhere APIs



Duck Creek
Technologies

Duck Creek Claims

- **Internet of Things (IoT)**, including drones for aerial supervision during extreme calamity.
- **Artificial intelligence (AI)** and machine learning (ML) for catastrophe loss analysis and reserve creation catering to similar records.
- **Image and video processing** for accurate loss estimation and conversion into ACORD format for data ingestion in Duck Creek claims.
- **Digital wallets** for faster and more efficient claims settlement to indemnify during natural disasters/major incidents.
- **Anywhere APIs** for seamless information extraction or integration to Duck Creek systems.
- **Dashboard monitoring** and real-time integration for insurers and reinsurers to have a common view of claims status and avoid claims leakage.
- **Duck Creek claims** system to run catastrophic claims management solution on top of it.

Hexaware's key solution components for catastrophic claims management are as described below:

Step	Utility Name	Description
Step 1	Catastrophe Identification	The system identifies a catastrophe that has occurred through integration with the authorized government system and triggers the First Notification of Loss (FNOL).
Step 2	Pseudo Claims Creation	The accelerator generates claims for all policies in the affected geographic area, regardless of the extent of the loss.
Step 3	Loss Identification	Drones and IoT-based surveillance add loss details against each claim created in the previous stage. Policyholders receive a notification via email/SMS with a link to upload loss information to create claims.
Step 4	Coverage Identification	The system identifies and adds the policy coverage based on the loss calculated in Step 3.
Step 5	Intelligent Monitoring	The system categorizes the regions into High, Medium, Low, and No Impact zones based on identifiers (drone images, government. reports, user inputs, etc.).

Step 6	Reserve Creation	It adds lines to respective claims based on the loss information received against the coverages. Also, it conducts the auto-coverage match process and sets up auto-reserve.
Step 7	Reinsurance Reserve Estimator	It prepares a detailed report and sends it to the reinsurance company for reserve estimation based on the type of reinsurance contract and calculated reserve.
Step 8	Automated Payouts	It ensures speedier payouts to e-wallets like Imburse and Ingo Money for high-impacted zone insureds and waits for more information on peripherals.
Step 9	Third-Party Vendor Integrations	The system integrates with third-party vendors, such as network hospitals, contractors, legal advisors, etc., to expedite claim settlements and improve customer experience.
Step 10	Dashboard	The solution includes a centralized hub for insurers and reinsurers to monitor claim status, analyze catastrophe impact, categorize claims, calculate reserve, manage contractual obligations, collaborate, track claims payments, and generate reports/analytics.

By embarking on the path towards hyperautomation of catastrophic insurance claims, insurance enterprises can achieve:

- **Efficiency and Automation:** By incorporating automation, machine learning, image and video processing, and IoT, our solution streamlines and automates the process. This results in improved operational efficiency, reduced costs, and faster claims settlement.
- **Real-time Data and Analytics:** Our solution enables real-time data collection through various sources like drones, IoT devices, and more. It processes and analyzes the data using advanced analytics and machine learning algorithms. It enables insurers and reinsurers to make data-driven decisions, accurately assess reserves, and identify potential fraud claims.
- **Customer-centric Approach:** Our solution follows a customer-centric approach, providing faster claims notification, transparent communication, and quicker claims settlement in the digital wallet. This improves customer experiences, satisfaction, and loyalty.

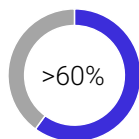
- Collaboration and Business Engagement:** Our solution provides a common dashboard for seamless communication and collaboration among insurers and reinsurers. This fosters improved business engagement and decision-making capabilities. It also enables efficient teamwork, quick issue resolution, and stronger business relationships.

Value Realization

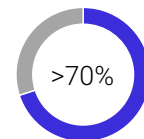
Hexaware’s catastrophic claims solution implementation helps insurers realize value early during the catastrophe, reducing the time required to complete the entire process.

Our solution can seamlessly integrate into the existing Duck Creek Claims Suite within 6-8 weeks. This allows insurers to efficiently handle a large volume of claims during a catastrophe without impacting the FNOL process.

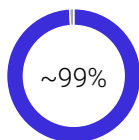
Value Realization Parameters



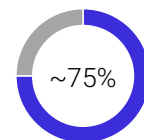
Reduced claim creation and processing time.



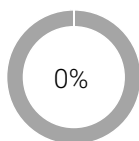
Reduced cost by automating additional human resources provisioning during catastrophes



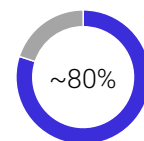
Accurate reserve estimates based on loss information.



Faster payment in the digital wallet for qualified claims.



No claims leakage to reinsurance.



Faster end-to-end claims process.

Benefits Illustration

From the Perspective of an Insurance Carrier

- Enhance customer loyalty by faster claims settlement during their most distressing times.
- Minimize claims loss costs through faster adjudication.
- Minimize delays in reinsurance reporting and prevent claims leakage.
- Monitor critical claims through a centralized dashboard.
- Receive immediate support from the reinsurer on reserve.

From the Perspective of Reinsurance Carrier

- Receive early intimation of large catastrophe claims.
- Minimize potential liability from a delayed settlement of ceded claims to insurers.
- Achieve transparency through a real-time dashboard created by the insurance claims system.

From the Perspective of the Customer

- Get timely help in difficult times.
- Receive quick notifications for claims creation.
- Get paid faster from insurance companies with direct credit into the digital wallet.

How Hexaware Can Help Manage Catastrophe Claims

Our solution is a framework based on Hyperautomated Claims Management designed to deploy in our customers' systems seamlessly. This framework has undergone thorough conceptualization, lab testing, and successful proof of concept and has also been showcased to Duck Creek Technologies.

- **Our Strengths:** With deep experience working with P&C insurers and expertise in Duck Creek claims, Hexaware has developed value-added solutions and technology offerings that make the insurers' and reinsurers' catastrophe claims journey hassle-free.

- **Experienced and Certified Team:** Our solution implementation is executed and delivered by Duck Creek Claims & DCOD certified specialists and Cloud Platform Certified consultants, who are experienced in delivering multiple specialized solutions beyond holistic transformation.
- **Partnership Support:** Our strong partnership with Duck Creek provides an additional layer of technical expertise and the availability of tools and accelerators to execute the solution successfully.



Conclusion

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In conclusion, technology offers a valuable opportunity for insurers to handle catastrophe claims more efficiently and effectively. By using AI and ML, drones, mobile apps, and blockchain, insurers can automate manual tasks, assess damage more quickly and accurately, provide real-time updates to customers, and improve the accuracy and transparency of claims processing. Embracing these technologies enables insurers to improve the customer experience and effectively manage the risks associated with catastrophic events.

If you are embarking on an innovation journey, seeking to automate product design and processes, and aiming to provide a unique and fulfilling journey to your customers, this is the right place for you. We'll be glad to have a detailed discussion on how we can help transform your business, drive innovation, and reduce operational costs. Get in touch with us at marketing@hexaware.com.

About Hexaware

Hexaware is a global technology and business process services company. Our 27,000 Hexawarians wake up every day with a singular purpose; to create smiles through great people and technology. With this purpose gaining momentum, we are well on our way to realizing our vision of being the most loved digital transformation partner in the world. We also seek to protect the planet and build a better tomorrow for our customers, employees, partners, investors, and the communities in which we operate.

With 40+ offices in 19 countries, we empower enterprises worldwide to realize digital transformation at scale and speed by partnering with them to build, transform, run, and optimize their technology and business processes.

Learn more about Hexaware at www.hexaware.com

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