

Key Tech Away: Technology Providers in the Trust and Safety Landscape

April 2023: Complimentary Abstract / Table of Contents



Our research offerings

This report is included in the following research program(s):

Trust and Safety

- ▶ Amazon Web Services (AWS)
- ▶ Application Services
- ▶ Artificial Intelligence (AI)
- ▶ Asset and Wealth Management
- ▶ Banking and Financial Services Business Process
- ▶ Banking and Financial Services Information Technology
- ▶ Catalyst™
- ▶ Clinical Development Technology
- ▶ Cloud and Infrastructure
- ▶ Contingent Staffing
- ▶ Contingent Workforce Management
- ▶ Customer Experience Management Services
- ▶ CX Excellence
- ▶ CXM Technology
- ▶ Cybersecurity
- ▶ Data and Analytics
- ▶ Digital Adoption Platforms
- ▶ Digital Engineering Services
- ▶ Digital Services
- ▶ Digital Workplace
- ▶ Employee Experience Management (EXM) Platforms
- ▶ Employer of Record (EOR)
- ▶ Engineering Services
- ▶ Enterprise Platform Services
- ▶ Exponential Technologies
- ▶ Finance and Accounting
- ▶ Financial Services Technology (FinTech)
- ▶ GBS Talent Excellence
- ▶ Global Business Services
- ▶ Google Cloud
- ▶ Healthcare Business Process
- ▶ Healthcare Information Technology
- ▶ HealthTech
- ▶ Human Resources
- ▶ Insurance Business Process
- ▶ Insurance Information Technology
- ▶ Insurance Technology (InsurTech)
- ▶ Insurance Third-Party Administration (TPA) Services
- ▶ Intelligent Document Processing
- ▶ Interactive Experience (IX) Services
- ▶ IT Services Excellence
- ▶ IT Services Executive Insights™
- ▶ IT Talent Excellence
- ▶ Life Sciences Business Process
- ▶ Life Sciences Commercial Technologies
- ▶ Life Sciences Information Technology
- ▶ Locations Insider™
- ▶ Marketing Services
- ▶ Market Vista™
- ▶ Microsoft Azure
- ▶ Modern Application Development (MAD)
- ▶ Mortgage Operations
- ▶ Multi-country Payroll
- ▶ Network Services and 5G
- ▶ Oracle Services
- ▶ Outsourcing Excellence
- ▶ Pricing Analytics as a Service
- ▶ Process Mining
- ▶ Process Orchestration
- ▶ Procurement and Supply Chain
- ▶ Recruitment
- ▶ Retail and CPG Information Technology
- ▶ Retirement Technologies
- ▶ Revenue Cycle Management
- ▶ Rewards and Recognition
- ▶ SAP Services
- ▶ Service Optimization Technologies
- ▶ Software Product Engineering Services
- ▶ Supply Chain Management (SCM) Services
- ▶ Sustainability Technology and Services
- ▶ Talent Genius™
- ▶ Technology Skills and Talent
- ▶ Trust and Safety
- ▶ Value and Quality Assurance (VQA)

If you want to learn whether your organization has a membership agreement or request information on pricing and membership options, please contact us at info@everestgrp.com

Learn more about our
custom research capabilities

Benchmarking

Contract assessment

Peer analysis

Market intelligence

Tracking: providers, locations,
risk, technologies

Locations: costs, skills,
sustainability, portfolios

Contents

For more information on this and other research published by Everest Group, please contact us:

Manu Aggarwal, Partner

Abhijnan Dasgupta, Practice Director

Aseem Nousher, Senior Analyst

Shubhali Jain, Analyst

| | |
|---|-----------|
| 1. Introduction and overview | 6 |
| • Research methodology | 7 |
| • Everest Group Trust and Safety (T&S) services process map | 8 |
| • Source of information | 10 |
| • Introduction | 11 |
| 2. Executive summary | 12 |
| 3. Current T&S solutions are largely human-focused | 16 |
| • Explosive growth in content requires scalable T&S solutions | 18 |
| • Enterprises are compelled to reach out to multiple providers to meet all their T&S technology needs | 20 |
| • Technology investments lag growth in emerging content types | 21 |
| • Technology development needs to keep pace with the evolving regulatory landscape | 23 |
| • Human intervention is prevalent at each step of moderation | 24 |
| 4. Light at the end of the tunnel | 25 |
| • Emergence of new technologies | 27 |
| • Increasing collaboration between service providers and technology providers | 28 |
| • Increasing integration of multiple content moderation solutions | 29 |
| 5. It is time to R.A.I.S.E. the game | 30 |
| • A platform-based solution | 32 |
| • Collaborative approach to technology investments | 34 |
| • R.A.I.S.E. framework | 35 |

Contents

| | |
|---|-----------|
| 6. Technology provider landscape | 36 |
| • The T&S landscape | 37 |
| • Geographical distribution of technology providers | 38 |
| • Industry and work type split of technology providers | 39 |
| • List of T&S technology providers by work type | 40 |
| • List of featured T&S technology providers | 41 |
| 7. Profiles of technology providers in the T&S space | 42 |
| • Technology provider dashboard | 43 |
| • ActiveFence | 45 |
| • Besedo | 47 |
| • Checkstep | 49 |
| • Crisp, A Kroll Business | 51 |
| • Headspace | 53 |
| • Hive | 55 |
| • Imagga | 57 |
| • Incognia | 59 |
| • Innodata | 61 |
| • Modulate | 63 |
| • Safer | 65 |
| • Smart Moderation | 67 |

Contents

- Spectrum Labs 69
- Speechly 71
- Tisane Labs 73
- Trust Lab 75
- Two Hat 77
- WebPurify 79
- Zevo Health 81
- 8. Appendix 83**
- Glossary of key terms used in the report 84
- Research calendar 85

Introduction

As the volume and variety of content on the internet continue to surge, the universe of toxic content is also expanding rapidly. Enterprises are compelled to moderate content in real-time and provide adequate safety features in platforms to provide a safe experience to users. An effective tech-based solution that can fast-track the moderation process and minimize the requirement for a moderator going through the toxic content is the need of the hour. However, the current third-party technology for T&S is still not advanced, and hence T&S technology only provides a first layer of filtering while a significant portion of content moderation is still being handled by human moderators.

The role of technology solutions in T&S is bound to grow in the long run. The T&S technology market is undergoing an evolutionary phase, with certain technology providers now offering innovative solutions to detect evolving risks. The industry is gradually moving toward a holistic, end-to-end platform-based solution that can safeguard the digital space from a wide range of threats. To achieve this future state, closer collaboration among all stakeholders, including technology providers, service providers, and enterprises, is imminent.

In this research, we present detailed profiles of 19-technology providers. Each provider profile presents a snapshot of its leadership, funding and growth, technology capabilities, market recognition, partnership ecosystem, and innovation.

In this research, we focus on:

- Current state of the T&S technology market
- Evolving trends in the market
- Future state of T&S technology market
- Technology provider landscape
- Profiles of technology providers in the T&S space

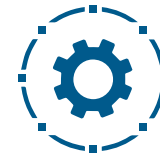
Scope of this report



Geography
Global



Industry
All industry verticals



Profiles
19 T&S technology providers

Overview and abbreviated summary of key messages

This report examines the T&S technology landscape and provides a detailed analysis of the current T&S technology market state, evolving market trends, the future state of the T&S technology market, and the technology provider landscape along with the profiles of 19 technology providers

Some of the findings in this report, among others, are:

Current T&S solutions are largely human-focused

- Explosive growth in content requires scalable T&S solutions
- Enterprises are compelled to reach out to multiple providers to meet all their T&S technology needs
- Technology investments lag growth in emerging content types such as the metaverse and AI-generated content
- Technology development needs to keep pace with the evolving regulatory landscape
- Human intervention continues to be prevalent at each step of moderation

Light at the end of the tunnel

- An evolution is underway in the market, marked by the emergence of new technologies such as contextual API, increasing collaboration between service providers and technology providers to deliver a combined solution, and increasing integration of multiple content moderation solutions to create an end-to-end solution

It is time to R.A.I.S.E. the game

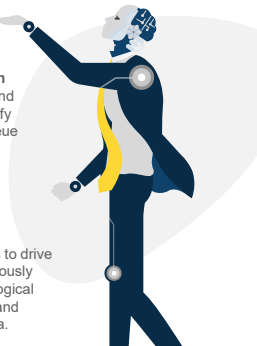
- In the future, a holistic, platform-based T&S solution that caters to multiple work types and content formats will become a minimum requirement, in which generative AI has the transformative power to become the cornerstone technology in T&S platforms
- It will require increased collaboration and co-investment from service providers, technology providers, and enterprises
- This will give rise to an ecosystem expansion in which The demand will shift from content moderation to the safety of the digital ecosystem

Technology provider landscape

- Technology providers belong to seven major work types: content and ad moderation, data annotation, platform safety, language translation and transcription, risk intelligence, search relevance, and wellness
- This report features two technology provider categories: the largest T&S technology providers and a selection of niche providers that have unique value propositions

This study offers four distinct chapters providing a deep dive into key aspects of T&S technology market; below are four charts to illustrate the depth of the report

Technologies shaping T&S solutions



Natural Language Processing (NLP) gives computers the ability to read, comprehend, and interpret human languages. This includes text processing, retrieval, summarization, translation, and sentiment analysis.

Artificial Intelligence (AI) / Machine Learning (ML) use algorithms and statistical models to automatically identify and remove inappropriate or harmful content and analyze large amount of content to detect threats.

Optical Character Recognition (OCR) combines text detection and transcription capabilities to identify text embedded in images and queue it for automated moderation.

Computer Vision leverages AI to enable automatic extraction, analysis, and understanding of useful information from digital images and visual inputs.

Digital Hash creates digital signature for content to detect illegal/harmful images such as Child Sexual Abuse Material (CSAM) and copyright infringement when reshared.

Deep Learning uses neural networks to drive human-like conclusions by continuously evaluating data with a predefined logical structure to recognize, classify, and characterize objects within data.

Generative AI is a type of artificial intelligence that can create new and diverse data forms, including images, audio, text, and videos. Generative AI in trust and safety is a double-edged sword: on one hand, it introduces potential risks; on the other hand, it holds promising potential to improve and strengthen trust and safety solutions.

Emerging T&S technologies

Contextual AI examines the context in which user-generated content is presented in order to identify and respond to prohibited activities in real-time

- Understand need**
Identify intent(s) and entities in the request using NLU models, automatic speech recognition, and deep learning-based approaches
- Detect plagiarism**
Streamline the plagiarism detection process, improve accuracy, reduce false positives, and provide enhanced reporting capabilities
- Improve user experience**
Platforms can now provide their users with an option to filter out AI-generated content, increasing the credibility of the platform

Demographic API uses a deep-learning model to identify the gender, age, and multicultural appearance of people's faces

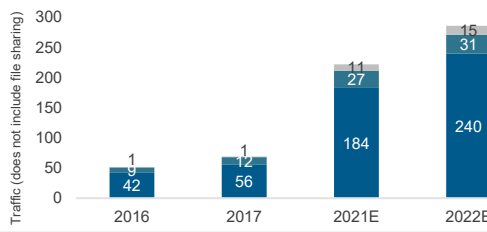
- Age gate enforcement**
Recognize underage users on dating or social media platforms to enforce age-based restrictions
- User authentication**
Scan user photos to verify users based on age and gender on social media, dating apps, or chats
- Remove race bias**
The inclusion of datasets of multi-cultural appearances results in no bias moderation toward any culture

AI-generated content detection tool harness the power of AI to classify between AI-generated and human-written text and images

- First level of screening**
Detect AI-generated content that is not easily recognizable to human eyes, reducing moderators' time and increasing the accuracy of content moderation
- Detect plagiarism**
Streamline the plagiarism detection process, improve accuracy, reduce false positives, and provide enhanced reporting capabilities
- Improve user experience**
Platforms can now provide their users with an option to filter out AI-generated content, increasing the credibility of the platform

Current state of the T&S technology market

Global monthly consumer internet data traffic (2016-22; in exabytes/month) and the prominent content types that constitute this volume



| Year | Internet video | Web, email, and data | Online gaming |
|-------|----------------|----------------------|---------------|
| 2016 | 42 | 1 | 9 |
| 2017 | 56 | 12 | 1 |
| 2021E | 184 | 27 | 11 |
| 2022E | 240 | 31 | 15 |

To handle this sheer volume of content, a T&S solution is required for ensuring platform safety, maintaining community standards, and preventing the spread of harmful threats, and which:

- Understands local and cultural nuances to handle the complexity of content
- Is scalable to cater to a range of content formats, including emerging formats, to effectively handle harmful content
- Works on a contextual approach to accurately identify and deal with vast amounts of content
- Has the ability to recognize and counteract tactics used by users to bypass moderation filters

Generative AI is poised to exponentially expand content production. According to experts, by 2025, over 90% of the digital content could be generated by AI.²

ILLUSTRATIVE

The majority of scalable solutions are owned by enterprises

amazon

Amazon Rekognition Content Moderation tool uses ML to automate and streamline moderation, detect inappropriate content, and keep users safe with customizable API.

Microsoft

Microsoft Azure Content Moderator provides AI-based, customizable, scalable, real-time moderation tools along with pre-built workflows for a comprehensive solution.

Alibaba Cloud

Alibaba's content moderation tool uses AI and big data to monitor content. It is highly scalable and customizable to quickly recognize and respond to adverse content.

Meta

The Hasher-Matcher-Actioner system stops the spread of illegal and harmful content. It builds on Meta's previous open-source image and video matching software.

Technology provider landscape

T&S landscape

Integrated solution providers

Primary role:
Provide integrated human + tech T&S solutions. They also provide value-added services such as policy advisory

Value proposition:

- Scalable solutions across industries
- Global reach

Product companies

Primary role:
Leveraged primarily for their technology solutions, available as a stand-alone product/solution for independent licensing

Value proposition:

- Technology expertise
- Industry- and content-specific solutions
- Some of them also offer stand-alone human moderation support

Seven work types

Content and ad moderation

Platform safety

Language translations and transcription

Risk intelligence

Search relevance

Wellness

Data annotation

The Key Tech Away: Technology Providers in the Trust and Safety Landscape report features 19 technology provider profiles

Key Tech Away: Technology Providers in the Trust and Safety Landscape

Technology Provider 1 | company profile (page 1 of 2)

Company overview

Technology Provider 1 is a global content moderation technology provider that helps business and organizations keep their online platforms safe and secure. moderation solutions possible, helping business and organization maintain safe and engaging online communities. Over XYZ, serves clients in more than XY

Fact sheet

| Headquarters | Number of employees | Estimated annual revenue (US\$ million) |
|--------------|---------------------|---|
| XYZ | XYZ | XYZ |

| Key executives | Key investors |
|---|---------------|
| <ul style="list-style-type: none"> XYZ, Chief Executive Officer XYZ, Chief Technologist XYZ, Chief Operating Officer | XYZ |

| Dimension | Everest Group's perspective |
|--|--|
| Vision and strategy | Future oriented vision and proactive strategy are key to their success as a leading content moderati |
| Trust and safety focus areas | Content moderation provider covering all content types and threats |
| Technology capability | Leverages advanced machine learning and natural language processing capabilities to flag and rem |
| Innovation and investments | Continued investment in product development, and technology, as well as notable partnerships with |
| Client spread / industry coverage | Caters to small, midsize, and large enterprises spanning social media, streaming and gaming, eCor |
| Market success | Ability to provide highly effective, scalable and efficient content moderation solutions that meet the e |

Everest Group® Proprietary & Confidential. © 2023, Everest Global, Inc. | EGR-2023-67-R-5934

Key Tech Away: Technology Providers in the Trust and Safety Landscape

Technology Provider 1 | solutions, partnerships, and strategy (page 2 of 2)

Capability overview

- **XYZ**
It is an automated content moderation solution using machine learning and natural language processing
- **XYZ**
It is a multilingual content moderation solution for global businesses and organizations
- **XYZ**
It is a comprehensive suite of content moderation tools to ensure that businesses and organizations can maintain a safe and engaging online environment for all users
- **XYZ**
It can detect and remove inappropriate or harmful images in real-time
- **XYZ**
It can detect and remove inappropriate content in real-time, ensuring that live streams are safe and appropriate for all viewers
- **XYZ**
It can detect and remove content that infringes on a brand's intellectual property rights, ensuring that businesses and organizations can protect their brand identity and reputation
- **XYZ**
It monitors user behavior and engagement data alongside content moderation efforts

Future strategy

- Expand its presence in emerging markets such as Southeast Asia, Africa, and Latin America
- Continue to invest heavily in research and development to stay ahead of the curve in the rapidly evolving field of content moderation technology
- Establish strategic partnerships with other leading technology companies to expand its reach and provide integrated content moderation solutions

Everest Group® Proprietary & Confidential. © 2023, Everest Global, Inc. | EGR-2023-67-R-5934

Client portfolio

XYZ

Key partnerships

XYZ

Case studies

XYZ helped a social media platform, XYZ, to moderate in real time
By removing inappropriate and offensive content in real-time XYZ helped XYZ to achieve a higher engagement rates, and improved brand reputation

XYZ helped a eCommerce platform, XYZ, increase its ratings
XYZ helped XYZ improve the quality and credibility of their product listings by removing fake reviews and fraudulent content

Research calendar

Trust and Safety

Published Planned Current release

| Reports title | Release date |
|--|-------------------|
| Taming the Hydra: Trust and Safety (T&S) in the Metaverse | July 2022 |
| Wisdom of the Crowd: The Gig Delivery Model in Trust and Safety (T&S) | August 2022 |
| Braving New Frontiers: Trust and Safety State of the Market Report 2022 | August 2022 |
| What's the Deal? Evolving Sourcing Priorities in Trust and Safety | November 2022 |
| Content Moderation Catch 22: Walking the Regulatory Tightrope | December 2022 |
| A Beautiful Mind: Ensuring Moderator Well-being | December 2022 |
| Trust and Safety Services PEAK Matrix® Assessment 2023 | March 2023 |
| Key Tech Away: Technology Providers in the Trust and Safety Landscape | April 2023 |
| Press Play on Player Experience: Level up Beyond Game Design | Q2 2023 |
| Trust and Safety Service Provider Compendium 2023 | Q2 2023 |
| Trust and Safety Services State of the Market 2023 | Q2 2023 |
| Content Moderator of the Future | Q3 2023 |

Note: [Click](#) to see a list of all of our published Trust and Safety reports



Everest Group is a leading research firm helping business leaders make confident decisions. We guide clients through today's market challenges and strengthen their strategies by applying contextualized problem-solving to their unique situations. This drives maximized operational and financial performance and transformative experiences. Our deep expertise and tenacious research focused on technology, business processes, and engineering through the lenses of talent, sustainability, and sourcing delivers precise and action-oriented guidance. Find further details and in-depth content at www.everestgrp.com.

Stay connected

Dallas (Headquarters)
info@everestgrp.com
+1-214-451-3000

Bangalore
india@everestgrp.com
+91-80-61463500

Delhi
india@everestgrp.com
+91-124-496-1000

London
unitedkingdom@everestgrp.com
+44-207-129-1318

Toronto
canada@everestgrp.com
+1-647-557-3475

This document is for informational purposes only, and it is being provided "as is" and "as available" without any warranty of any kind, including any warranties of completeness, adequacy, or fitness for a particular purpose. Everest Group is not a legal or investment adviser; the contents of this document should not be construed as legal, tax, or investment advice. This document should not be used as a substitute for consultation with professional advisors, and Everest Group disclaims liability for any actions or decisions not to act that are taken as a result of any material in this publication.

Website
everestgrp.com

Social Media
 @EverestGroup
 @Everest Group
 @Everest Group
 @Everest Group

Blog
everestgrp.com/blog

NOTICE AND DISCLAIMERS

IMPORTANT INFORMATION. PLEASE REVIEW THIS NOTICE CAREFULLY AND IN ITS ENTIRETY. THROUGH YOUR ACCESS, YOU AGREE TO EVEREST GROUP'S TERMS OF USE.

Everest Group's Terms of Use, available at www.everestgrp.com/terms-of-use/, is hereby incorporated by reference as if fully reproduced herein. Parts of these terms are pasted below for convenience; please refer to the link above for the full version of the Terms of Use.

Everest Group is not registered as an investment adviser or research analyst with the U.S. Securities and Exchange Commission, the Financial Industry Regulatory Authority (FINRA), or any state or foreign securities regulatory authority. For the avoidance of doubt, Everest Group is not providing any advice concerning securities as defined by the law or any regulatory entity or an analysis of equity securities as defined by the law or any regulatory entity.

All Everest Group Products and/or Services are for informational purposes only and are provided "as is" without any warranty of any kind. You understand and expressly agree that you assume the entire risk as to your use and any reliance upon any Product or Service. Everest Group is not a legal, tax, financial, or investment advisor, and nothing provided by Everest Group is legal, tax, financial, or investment advice. Nothing Everest Group provides is an offer to sell or a solicitation of an offer to purchase any securities or instruments from any entity. Nothing from Everest Group may be used or relied upon in evaluating the merits of any investment. Do not base any investment decisions, in whole or part, on anything provided by Everest Group.

Products and/or Services represent research opinions or viewpoints, not representations or statements of fact. Accessing, using, or receiving a grant of access to an Everest Group Product and/or Service does not constitute any recommendation by Everest Group that recipient (1) take any action or refrain from taking any action or (2) enter into a particular transaction. Nothing from Everest Group will be relied upon or interpreted as a promise or representation as to past, present, or future performance of a business or a market. The information contained in any Everest Group Product and/or Service is as of the date prepared, and Everest Group has no duty or obligation to update or revise the information or documentation. Everest Group may have obtained information that appears in its Products and/or Services from the parties mentioned therein, public sources, or third-party sources, including information related to financials, estimates, and/or forecasts. Everest Group has not audited such information and assumes no responsibility for independently verifying such information as Everest Group has relied on such information being complete and accurate in all respects. Note, companies mentioned in Products and/or Services may be customers of Everest Group or have interacted with Everest Group in some other way, including, without limitation, participating in Everest Group research activities.