

F R O S T & S U L L I V A N

2024 ENABLING TECHNOLOGY LEADER

*IN THE GLOBAL
IDENTITY VERIFICATION
SOLUTIONS INDUSTRY*

Regula

F R O S T & S U L L I V A N

2024
BEST
PRACTICES
AWARD

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each Award category before determining the final Award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Regula excels in many of the criteria in the identity verification solutions space.

AWARD CRITERIA	
<i>Technology Leverage</i>	<i>Customer Impact</i>
Commitment to Innovation	Price/Performance Value
Commitment to Creativity	Customer Purchase Experience
Stage Gate Efficiency	Customer Ownership Experience
Commercialization Success	Customer Service Experience
Application Diversity	Brand Equity

Evolution and Imperative of Identity Verification Technologies

Identity verification technologies are an indispensable cornerstone of the digital economy. At its essence, these tools serve as the bedrock, validating and linking critical personal information, such as name, address, age, and phone number, to individuals. Whether making purchases on e-commerce platforms, accessing government services, or managing financial transactions, many countries mandate identity verification for these activities. The advent of centralized digital identity documents (ID) adds a layer of comprehensive convenience for citizens. Notable examples include the European digital identity, seamlessly facilitating public and private service utilization across the European Union for its citizens, residents, and businesses.¹ Similarly, Singapore’s Singpass national ID application (app) streamlines access to government services and businesses through biometric thumbprints or face verification.²

Frost & Sullivan appreciates how identity verification technologies’ transformative power extends beyond borders, transcending physical documentation and leveraging the hardware and digital software’s capabilities. Virtual ID verification, propelled by advances in identity verification hardware and digital software technologies, has become increasingly accurate and user-friendly. However, as these tools gain prominence, ensuring their accessibility to all individuals becomes necessary. A significant proportion of the global population lacks access to digital tools, highlighting the urgent need for inclusive identity verification solutions.

In the face of an escalating wave of sophisticated fraud, identity theft, and scams, the urgency for a robust

¹ https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-digital-identity_en.

² <https://www.singpass.gov.sg/main>.

identity verification solution has never been more pronounced. The current landscape emphasizes the need for advanced solutions that prevent evolving threats. In response to this imperative, machine learning (ML) and artificial intelligence (AI) have emerged as pivotal players in the document verification space. Frost & Sullivan notes that these technologies demonstrate the capacity to analyze vast datasets, recognize patterns, and address threats associated with document or biometric fraud.

The contemporary arsenal of identity verification tools encompasses a spectrum of cutting-edge technologies. Liveness checks, which ascertain the biometric samples' vitality, multimodal verifications, smart physical IDs, optical character recognition (OCR), advanced face detection, and more, are actively being deployed by both companies and governments to fortify digital identity verification. This dynamic landscape is further enriched by digital identification solution providers continually innovating and harnessing the potential of AI and ML to elevate the digital ID ecosystem. While navigating a future where the stakes of identity verification are higher than ever, Frost & Sullivan points out that technological innovation and inclusivity's convergence become paramount.

Synergizing Cutting-edge Verification Technologies with an Intuitive User-centric Design

Regula is a leading provider of identity verification solutions, simplifying complex document authentication. Founded in 1992 and headquartered in Daugavpils, Latvia, Regula has amassed over three decades of invaluable experience in forensics, border control automation and identity verification. The company's innovative acumen is evident through its full-cycle in-house production, the most comprehensive database of document templates and a team of top-notch forensic experts.

“Regula strengthens its innovative approach by developing all technologies in-house and avoiding third-party dependencies. A standout feature is the platform-agnostic nature of its digital identification solutions, enabling customers to organize an enhanced ID verification process on any platform - mobile, web, desktop platforms, or passport readers.”

- Rabin Dhakal
Best Practices Research Analyst

Regula exemplifies an unwavering commitment to innovation, which is evident in its cutting-edge product portfolio that integrates software for identity document and biometric verification and forensic devices for document reading, authenticity control, and forensic examination. Regula provides a complete single-vendor solution for both document and biometric verification. At the core of its innovation is Regula Document Reader SDK, a groundbreaking identity verification solution automating the reading, verification and authenticity checks of passports, ID cards, driver's licenses, visas, and various other IDs. Regula highlights its commitment to

continuously adopting emerging technologies through Regula Face SDK, which offers advanced features for biometric verification such as face detection, liveness detection, face matching, and search.

Regula strengthens its innovative approach by developing all technologies in-house and avoiding third-party dependencies. A standout feature is the platform-agnostic nature of its digital identification solutions, enabling customers to organize an enhanced ID verification process on any platform - mobile, web, desktop platforms, or passport readers. Regula's products stand out from the competition due to its extensive knowledge and thorough examination of IDs, underpinned by the most comprehensive database covering over 13,500 documents from 247 countries and territories, and supporting over 138

languages.³ Paired with Regula Document Reader SDK, Regula Face SDK verifies a selfie against a photo from an ID matching the printed portrait, RFID chip photo, selfie uploaded via web or mobile device, and a portrait from an external database to ensure the person is the same in all the different photos.

Frost & Sullivan believes that Regula's proactive response to the evolving landscape of document fraud and fakes is unprecedented. Leveraging AI algorithms, the solution automatically identifies document type, analyzes the entire document page, cross-referencing data from various sources, performs authenticity checks of security features to verify and ensure document genuineness. Regula's cutting-edge NFC verification technology leverages both mobile NFC verification and complete server-side verification. In the "zero trust to mobile" approach, it adds another layer of protection against identity fraud with verification of electronic identity documents on a server-side and ensures that the document is not cloned or somehow altered.

The company's innovation extends to comprehensive fraud detection, executed through a user-friendly interface. Regula stays ahead of the curve by continuously refining its machine-readable zone reading technology and AI-based OCR, achieving a remarkable 99.7% accuracy in internal tests.⁴ Including liveness detection for documents adds an extra layer of security in remote customer onboarding scenarios, verifying dynamic security elements like holograms, screenshot checks, and electronic device checks.

As such, the company's commitment to creativity is not just in the functionality, but in the seamless integration of features, making the software both intuitive and accessible. The user-friendly interface conceals the complexity of the underlying technologies, offering a simple yet comprehensive solution to identity verification.

Frost & Sullivan commends Regula for its visionary innovation in the identity verification space, shaping the future of identity verification through a creative fusion of technological prowess and user-centric design.

Forging Strategic Alliances for a Collaborative Edge in Commercialization Success

Regula pioneers groundbreaking technologies and demonstrates a stellar track record of commercialization success, propelling innovative solutions to the market with unparalleled efficacy. The company's strategic collaboration with esteemed international organizations, such as the International Air Transport Association, International Organization for Migration, United Nations Development Programme, International Civil Aviation Organization, and INTERPOL, underlines its commitment to staying at the forefront of the industry. The significance of such collaborations lies in the symbiotic exchange of insights and crucial information about documents. Regula leverages these partnerships to continually enhance its technologies, ensuring that the company remains on the cutting edge and incorporating the latest data into its solutions.

Regula's solutions offer verifications at an unprecedented speed, which is a testament to its commercial success. Notably, in the electronic documents' verification, Regula's near-field communication technology introduces a 'zero trust to mobile' approach, adding an extra layer of protection against fraud. This technology, widely adopted by major banks in Europe and the Middle East, facilitates seamless remote

³ <https://regulaforensics.com/news/regula-extends-its-most-comprehensive-document-template-database-to-13000-items/>.

⁴ <https://regulaforensics.com/explore/technologies/liveness-verification/>.

verification without video interviews, simplifying customer onboarding processes in regulated industries such as banking. The plug-and-play integration of Regula's solution ensures compliance with regulations, compatibility across all devices and platforms, and reduced operational costs for businesses.

Regula's venture into biometry further solidifies its position as an industry leader. The company's strategic focus on thoroughly analyzing identity documents and converting data into multiple checks shows adaptability in a continuously evolving market. The key differentiator for Regula lies in the wealth of experience gained over the years - specifically in understanding documents and verification processes. The company's remarkable success extends to providing hardware and software digital identity verification solutions to a global network of over 1,000 organizations and 80 border control authorities.⁵

Frost & Sullivan praises Regula for its extensive global reach, innovative technologies, and successful market penetration in the identity verification solutions industry.

Transforming Customer Workflows through Value-driven Verification Solutions

Regula's value-driven identity verification solutions cover diverse industry verticals, including banking, financial technology (fintech), aviation, telecommunication, government authorities, education, healthcare, insurance, forensic labs, gambling, and others. The company's unique proposition lies in its rich heritage in the forensics space. The one-stop-shop nature of Regula's solutions eliminates the need for customers to engage multiple vendors for additional security measures, offering a holistic approach to security, forensics, and identity verification requirements.

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Best Practices Research Analyst

Regula's hardware solutions, adaptable to various environments, from fully-fledged checkpoints to tiny booths and mobile border control, demonstrate flexibility favored by border control authorities. In industries such as travel and hospitality, its solutions play a crucial role in automating security checks and flight boarding processes and enhancing overall operational efficiency with smart AI-based algorithms. In the fintech, banking, and crypto space, Regula streamlines know your customer (KYC) validation, allowing for the smooth creation of custom workflows.

Regula's SDKs further highlight its value proposition, offering white-labeling capabilities and adding text and graphic elements and out-of-the-box user interface localizations in over 30 languages. This adaptability ensures that Regula integrates into diverse customer flows, enhancing the overall user experience.

Regula has proven success across diverse industries, transforming the customer ownership experience. In the banking sector, Regula collaborates with UBS, the largest bank in Switzerland and the world's largest private bank, to revolutionize the account opening and access process. Regula Document Reader SDK and Regula Face SDK implementation transformed the traditional real-time video interview process into a fully automated, 24/7 accessible enrollment system, significantly reducing customer actions and time

⁵ <https://regulaforensics.com/company/partners/government/>.

investment.⁶ Similarly, in the aviation sector, Regula partners with AirAsia to provide a seamless travel experience amid the COVID-19 challenges. Integrating Regula Document Reader SDK into the AirAsia app enabled customers to achieve fast, reliable, seamless, and paperless self-check-in processes.⁷

“As part of our strategy to fully digitize the airline, we aim to provide a seamless travel process for our guests. The digital and contactless procedure, which includes online check-in anywhere, anytime with a mere click of a button, is a definitive gamechanger and also a strong way to restore confidence in air travel. The solution provided by Regula greatly complements our overall vision to become a leading travel and lifestyle super app and our transformation strategy to automate across all key customer touch points. Regula is a strong strategic partner which is always at hand to support us promptly whenever service is needed.”

- Kesavan Sivanandam, Chief Airport and Customer Experience Officer, AirAsia

Another impactful collaboration is with Suma México, a provider of KYC, know your business, anti-money laundering checks, and digital signature creation services. By switching to Regula Document Reader SDK, Suma México enhanced its ID verification technology, automating document type recognition and eliminating the need for manual checks and processing. Leveraging Regula’s technology, Suma México experienced a remarkable 200% growth in revenue over two years.⁸

“We are happy to have chosen Regula Document Reader SDK as our foundation for ID verification. With this solution, we are sure of the depth of document checks and can guarantee ultimate quality for our clients. And we especially value Regula’s most extensive document template database; we really haven’t found anything close to it. Having such a vast library at our service helps us address any case without delays or quality loss. Plus, with Regula we enjoy a flexible pricing model that easily adapts to our growing business.”

- Juan Pablo Romero, CEO, Suma México

Frost & Sullivan lauds Regula for providing cutting-edge solutions that transform the customer ownership experience, redefining efficiency, convenience, and success across a spectrum of industries.

Partnerships and Success Stories

Global enterprises and government authorities choose Regula’s solutions to streamline identity verification. For example, Regula has been a trusted technology partner for several years already for Mobile World Congress (MWC), an international industry event organized by the GSMA. It started when GSMA was looking for a technology for contactless and accurate verification of identity documents during a COVID-19 pandemic. It was important to avoid queues and maintain social distance, as well as comply with the requirements of the GDPR.

Regula Document Reader SDK was embedded into the GSMA user registration system to complete the registration process and detect fraudulent IDs on GSMA’s own web platform. For more than 100,000+ participants with a unique ID document the registration process took less than two minutes, and each ID

⁶ <https://regulaforensics.com/explore/customer-stories/ubs/>.

⁷ <https://regulaforensics.com/explore/customer-stories/airsia-aviation-group-limited/>.

⁸ <https://regulaforensics.com/explore/customer-stories/sumamexico/>.

verification was performed in seconds with the help of Regula Document Reader SDK.

“For flagship events like MWC Barcelona, the GSMA looks for cutting edge solutions to not only show technology at its best, but also to support their event security requirements. Regula offers an effective ID reading solution that allows GSMA to be more efficient and supports the improvement of the overall customer experience.”

- Wieke Sjahrir, Head of Event Technology, GSMA⁹

Likewise, in the education space, Regula partnered with global online testing giant Pearson VUE to help with the growing demand for safe and secure remote onboarding and authentication prompted by the COVID-19 pandemic. Pearson VUE, a division of Pearson, is the world’s largest digital learning company and boasts more than 35,000 employees around the world. More than 450 credential owners across the globe rely on Pearson VUE to help manage, develop, and deliver testing programs used by hundreds of millions of people each year. This growth in online traffic has led to a proportionate growth in the need for secure remote onboarding and authentication solutions. To accomplish this, Pearson VUE turned to Regula and its advanced digital forensic technology to help secure its remote digital onboarding process.

“We pride ourselves on operating to the highest standards around test security. One of the challenges we faced was designing an efficient process to validate IDs as authentic and valid – no matter which country in the world they come from. Regula’s technology offers global coverage and fast verification of government-issued identification documents. With Regula, not only have we enhanced our fraud prevention process, but we continue to offer a consistent candidate experience.”

- Farzana Ashraf, CTO & SVP, Products & Services, Pearson VUE¹⁰

Enduring Excellence Through Long-term Customer Relationships

Regula has cultivated exceptional brand equity over the years, a legacy built on a wealth of experience and unwavering commitment to excellence. The brand’s positive perception in the market is a direct result of its top-notch solutions, where the crucial balance of speed and accuracy is synonymous with Regula’s remarkable presence in the industry. This recognition translates into multiple industry accolades, solidifying Regula’s standing as a winner across various domains.

Regula’s brand equity is deeply rooted in the trust it builds with clients and the quality of its solutions, emphasizing long-term relationships with customers and partners. The company nicely demonstrates its commitment to quality by obtaining industry certifications, such as the International Organization for Standardization (ISO) 9001:2015 and ISO 27001:2013 standards, which enhance the brand’s credibility.

Regula’s customer-centric approach is not merely a tagline, but a driving force behind its constant improvement and success. The company draws inspiration from its customers, fostering a culture of innovation that thrives on the ideas of every individual within the organization. From its origins as a team of passionate engineers, Regula has grown into a robust ecosystem of science-backed solutions powered by 400 innovators. Its commitment to strategic partnerships is central to the company’s brand equity, seamlessly combining forensic industry expertise, proven solutions, and high-quality services. This

⁹ <https://www.mwcbarcelona.com/sponsors-partners/technology-partners>.

¹⁰ <https://regulaforensics.com/explore/customer-stories/pearson-education-inc/>.

approach ensures continuous innovation, allowing Regula to deliver solutions that resonate with the ever-evolving market.

The longevity of customer relationships is a testament to the enduring appeal of Regula's brand. Customers stick with Regula for extended periods, while openly praising the brand in various industry events and programs. These positive and enduring experiences propel Regula's brand recognition worldwide, attracting new companies eager to switch from other vendors to integrate Regula's superior, high-quality solutions into their systems.

Frost & Sullivan recognizes Regula, with its rich legacy and customer-centric ethos, for continuing to be a brand of choice and setting the standard for excellence in the identity verification solutions space.

Conclusion

Regula emerges as a pioneer and industry leader in identity verification solutions, embodying innovation, commitment to excellence, and customer-centricity. With over three decades of experience in forensics, the company seamlessly adapts to the evolving landscape of identity verification technologies. Its groundbreaking Regula Document Reader SDK and Regula Face SDK showcase a commitment to continuous emerging technology adoption, providing a comprehensive and efficient solution for automating identity verification processes.

Regula's competitive edge is amplified by its extensive knowledge of identity documents, boasting an internal database covering more than 13,500 documents from 247 countries and territories, and supporting over 138 languages. This depth of understanding enables Regula to offer value-driven identity verification solutions across diverse industry verticals - including financial technology, aviation, telecommunication, government authorities, and education. With its white-labeling capabilities and adaptable user-interface localizations, Regula's SDKs emphasize the company's commitment to delivering a user-friendly experience. Regula's success stems from its customer-centric ethos that actively drives continuous improvement and innovation and its technological prowess. The company's numerous success stories and customer endorsements reflect its dedication to building long-term relationships.

With its strong overall performance, Regula earns the 2024 Frost & Sullivan Global Enabling Technology Leadership Award in the identity verification solutions industry.

What You Need to Know about the Enabling Technology Leadership Recognition

Frost & Sullivan's Enabling Technology Leadership Award recognizes the company that applies its technology in new ways to improve existing products and services and elevate the customer experience.

Best Practices Award Analysis

For the Enabling Technology Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization Success: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at <http://www.frost.com>.

The Growth Pipeline Engine™

Frost & Sullivan’s proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator™.

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Key Impacts:

- **Growth Pipeline:** Continuous Flow of Growth Opportunities
- **Growth Strategies:** Proven Best Practices
- **Innovation Culture:** Optimized Customer Experience
- **ROI & Margin:** Implementation Excellence
- **Transformational Growth:** Industry Leadership



The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- **Mega Trend (MT)**
- **Business Model (BM)**
- **Technology (TE)**
- **Industries (IN)**
- **Customer (CU)**
- **Geographies (GE)**

