

Levels of Document Analysis Security for Automated ID Verification



Identity Verification

4 Levels of Document Analysis Security for Automated ID Verification

Automated ID document verification offers financial institutions a way to digitally verify the identity of new and existing customers.

The time it takes to verify an ID document depends on the level of document analysis configured as part of the process. There are four levels of document analysis security.

Determining the right level of analysis for a particular use case requires financial institutions to balance the risk associated with a product or process with the need to provide a good customer experience.

Each level of document analysis security is explored in more detail in this document.

| Security Level | Description | Customer Experience |
|------------------------------|---|--|
| Level 1 (Low) | Text Analysis Examines Visual Inspection Zone (VIZ) and Machine- Readable Zone (MRZ) for font, correct usage of font, logic, and positioning. | Very good Little friction for the customer. |
| Level 2 (Low-Mid) | Analysis of Replicable Patterns and Features Analyzes pattern recognition, metatext and chip detection. | Good High resolution images required. |
| Level 3 (Mid-High) | Analysis of Difficult to Replicate Patterns and Features Analyzes micro-printing, kinegram, OVI, and special inks. | Medium friction Special printers and material is required. Control of flash generally required, in some cases specialist hardware may be required. |
| Level 4 (High) | NFC Chip Reading Extraction of full image and data, and secured with a digital certificate. | High friction Access to chip reader is required, which requires a native app or specialist hardware. NFC is a better user experience if the user already has the app; less so if forced to download an app. |



Level 1 (Low)

Text Analysis

Examines Visual Inspection Zone (VIZ) and Machine-Readable Zone (MRZ) for font, correct usage of font, logic, and positioning.

DESCRIPTION OF ANALYSIS

- 1. VIZ/MRZ Data Comparison: Comparing that they relate to each other (MRZ cannot replicate accents and special characters)
- 2. Font Usage & Consistency: Are the fonts detected as expected?
- 3. MRZ Font Type: Is it the correct font?
- 4. MRZ Checksum: Is this the expected value?
- 5. Signature Known Font: Is a font being used instead of an actual signature?

CUSTOMER EXPERIENCE

Very good

Level 2 (Low-Mid)

Analysis of Replicable Patterns and Features

Analyzes pattern recognition, metatext and chip detection.

DESCRIPTION OF ANALYSIS

- 1. Human Face detection: Is it an actual face as opposed to an illustration?
- 2. Portrait Color, Positioning & Integration: Is it all as expected?
- 3. Visible Security Features: NFC (Near Field Communications) chip position and appearance, and printing technique.

CUSTOMER EXPERIENCE

Good





Level 3 (Mid-High)

Analysis of Difficult to Replicate Patterns and Features

Analysis of micro-printing, kinegram, OVI, and special inks.

DESCRIPTION OF ANALYSIS

- 1. Analysis of micro-printing.
- 2. Analysis of Kinegram security holograms.
- 3. Analysis of OVI (Optically Variable Ink)®: OVI has a twocolor shift, immediately apparent when viewed at different angles. As a high security product, OVI is instantly recognized and its colour shift cannot be photocopied or reproduced.
- 4. UV: Appearance in UV light.
- 5. Analysis of Optically Variable Device (OVD): OVD is an iridescent or non-iridescent security feature that exhibits different information, such as movement or color changes, depending on the viewing and/or lighting conditions. OVDs cannot be photocopied or scanned, nor can they be accurately replicated or reproduced.

CUSTOMER EXPERIENCE

Medium friction

Level 4 (High)

NFC Chip Reading

Extraction of full image and data, and secured with a digital certificate.

DESCRIPTION OF ANALYSIS

- Provides a very high security level as the chip contains the picture (better quality so better face comparison experience) and the person's personal data, so any physical manipulation of the document can be detected.
- 2. Unequivocal confirmation of the authenticity of chipped identity documents.
- 3. No manual input or OCR (Optical Character Recognition) mistakes.
- 4. Digital signature is used in the chip.

CUSTOMER EXPERIENCE

High friction



OneSpan

About OneSpan

OneSpan helps protect the world from digital fraud by establishing trust in people's identities, the devices they use and the transactions they carry out. We do this by making digital banking accessible, secure, easy and valuable. OneSpan's Trusted Identity platform and security solutions significantly reduce digital transaction fraud and enable regulatory compliance for more than 10,000 customers, including over half of the top 100 global banks. Whether through automating agreements, detecting fraud or securing financial transactions, OneSpan helps reduce costs and accelerate customer acquisition while improving the user experience. Learn more at **OneSpan.com**.

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