The profiling of false identity documents: a promising method to fight identity fraud

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1. Context and objective:
- False identity documents represent an important means used by organized crime
- Forensic intelligence can help distinguish organized from anecdotic frauds
- A general method for profiling false identity documents with the aim of discovering existing links based on visual forensic characteristics is presented

2. Postulates and hypotheses:
I. A false identity document is regarded as the trace left by the forger
II. Its material characteristics constitute the forger’s « signature » and depend on:
   - A particular technique
   - A specific equipment
   - Personal choices of production
III. Link inference: if documents share a common profile, they come from a common source (forger or workshop)

3. Forensic profile:
Made of 20 visual forensic characteristics such as:
- Printing techniques, reaction under UV light, typefaces codification, ways of imitating security features, alterations, etc.

4. Materials and methods:
More than 220 false identity documents collected from 9 Swiss police departments of three representative kinds were analyzed:
- Stolen blank French passports
- Counterfeit Iraqi driver’s licenses
- Falsified Bulgarian driver’s licenses
The methodology was as follows:
1. Description of their characteristics in an ad hoc database
2. Automatic and systematic detection of links by the database
3. Analysis of links and production of intelligence

5. Computer database (ProfID):
- Integrates forensic characteristics and circumstantial data
- Detects links automatically and systematically
- Provides statistics on false documents’ « security » features

6. Results:
6.1 Strategic intelligence:
- Links are detected for 30% to 60% of the documents, proof of a structured form of crime and not an accumulation of isolated cases
- A restricted number of forgers is responsible for these considerable parts of the market, priority targets identified through forensic intelligence
- Geographical and chronological analysis: groups of linked documents are interregional (>50% are trans-jurisdictional) and long-lasting (avg. 1.5 to 2 years)

6.2 Tactical intelligence:
Forensic links point out potential criminal interactions or undetected networks and suggest fusing inquiry teams working on different cases (boxes). In the example below, false identity documents are represented by the flag of the Swiss region in which they have been seized.

Note: a group links up documents with a common profile

7. Conclusion:
Profiling based on visual forensic characteristics:
- Is efficient and cost-effective: requires minimum equipment, time and training
- Produces relevant strategic and tactical intelligence
- Provides objective knowledge on a little studied form of crime
➤ Suggests targeted and therefore more efficient actions to fight fraud:
- Preventive: training, identity document designers consulting, alerts, …
- Repressive: objective dispatch of resources, new leads in criminal and terrorism investigations, tracing back the networks up to the forgers, …

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