



Workshop I - Future of NFIQ

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NFIQ – test of time

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- ÷ Novel definition of biometric quality
 - performance related
 - accepted by the community
- ÷ Interoperability
 - uniform interpretation
 - tuned to a class of matcher
- ÷ Open source
- ÷ Extensively examined
 - by NIST and others
 - tools for quality summarization, slap, ...

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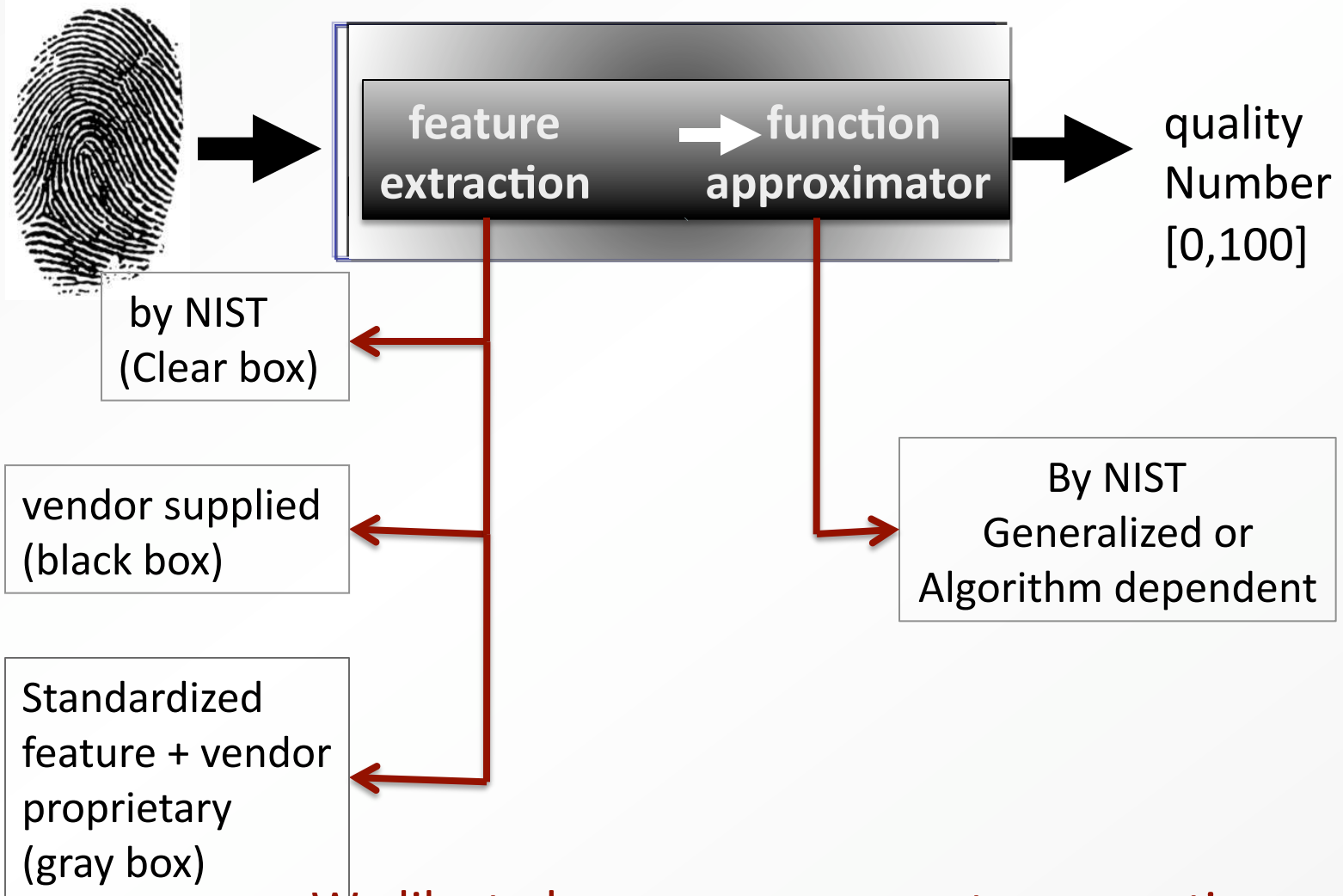
- ÷ Aging
 - recognition technology has advanced since 2004.
- ÷ Efficiency
 - ~300 msec per image - not fast enough for real time
 - takes 4 times for 4-finger slap
- ÷ Not enough levels
 - Still statistically significant
- ÷ Not enough NFIQ 4

Options for NFIQ 2.0 - 1

- ÷ Do nothing!
- ÷ Incremental updates to NFIQ towards NFIQ 2.0
 - An improved NFIQ, generalized vanilla flavor
 - feature extraction, training data, machine learning algorithm are all done by NIST
 - No ability to customize it to a particular application
 - Limited collaboration with industry
- ÷ Modular NFIQ 2.0
 - Plug-and-play feature vector
 - Improves efficiency in field operations
 - NIST does the training using its large sets of data
 - Generalized or specialized to a particular comparison algorithm
 - Feedback to vendors
 - Expands the marketplace of interoperable products
 - Calibrated quality in standardized range [0,100]

We like to hear your comments, suggestions.

options for NFIQ 2.0 - 2



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