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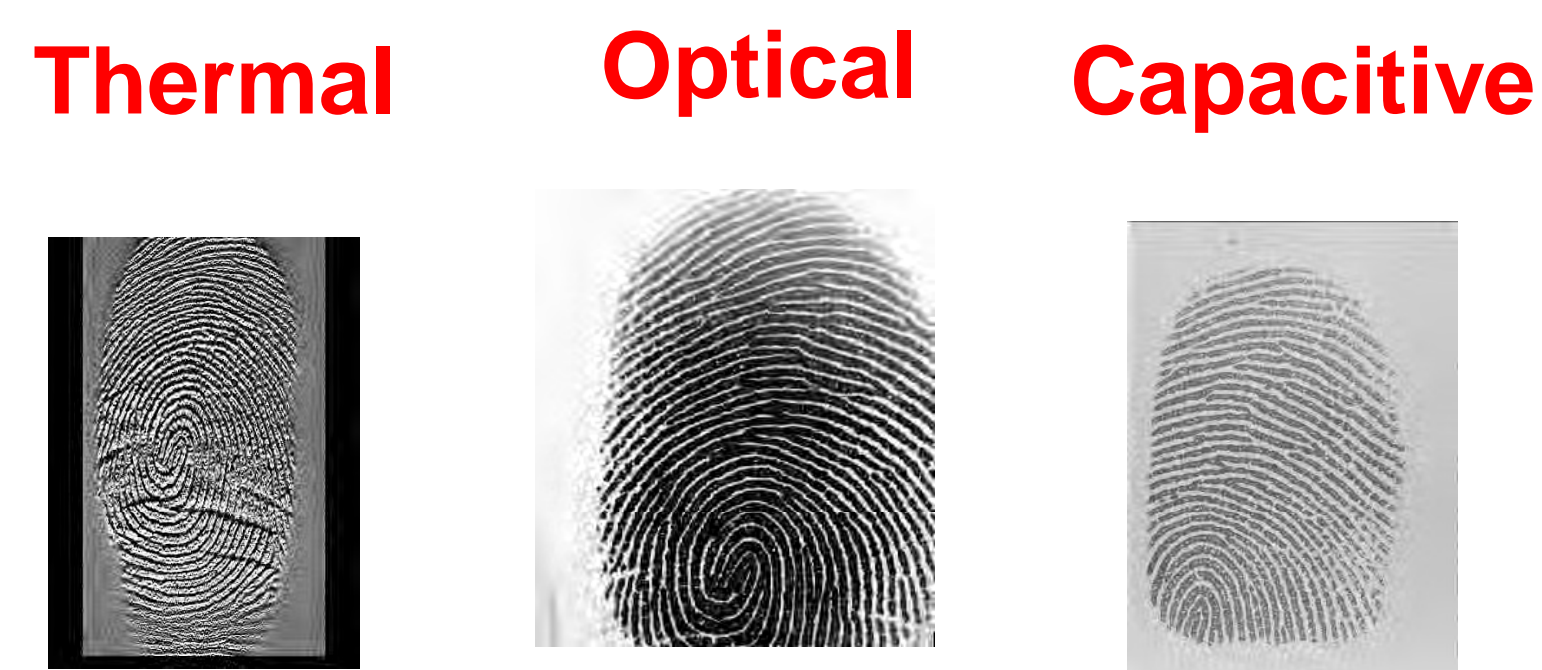
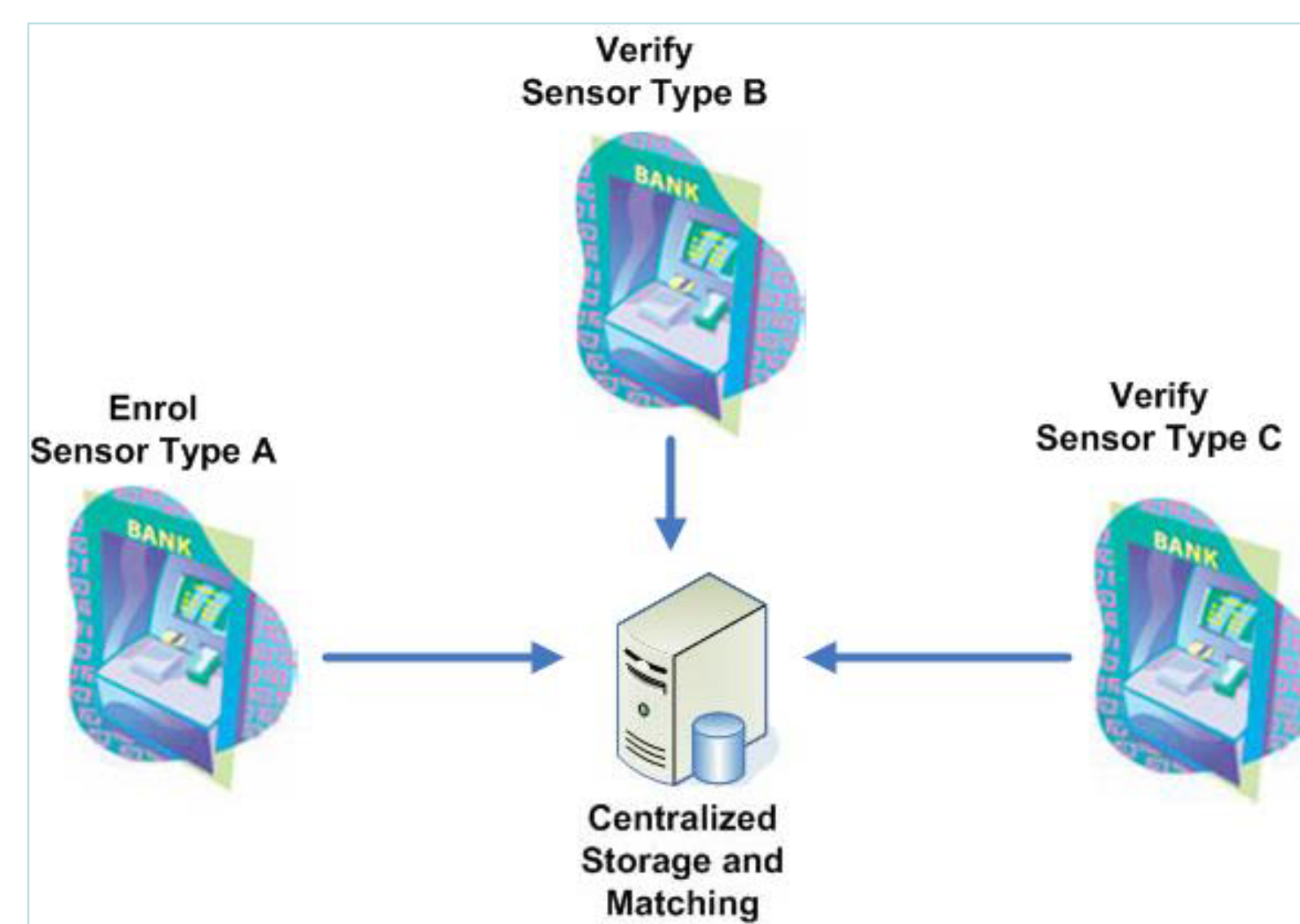
## Fingerprint Sensor Interoperability: Performance Evaluation of a Multi-Sensor System

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### Motivation

- Biometric systems are increasingly deployed as distributed architectures
- Sensor technologies introduce their own distortions and variations
- Matching fingerprints collected from different sensors increases matching error rates
- Gain a better understanding of factors which affect interoperability error rates

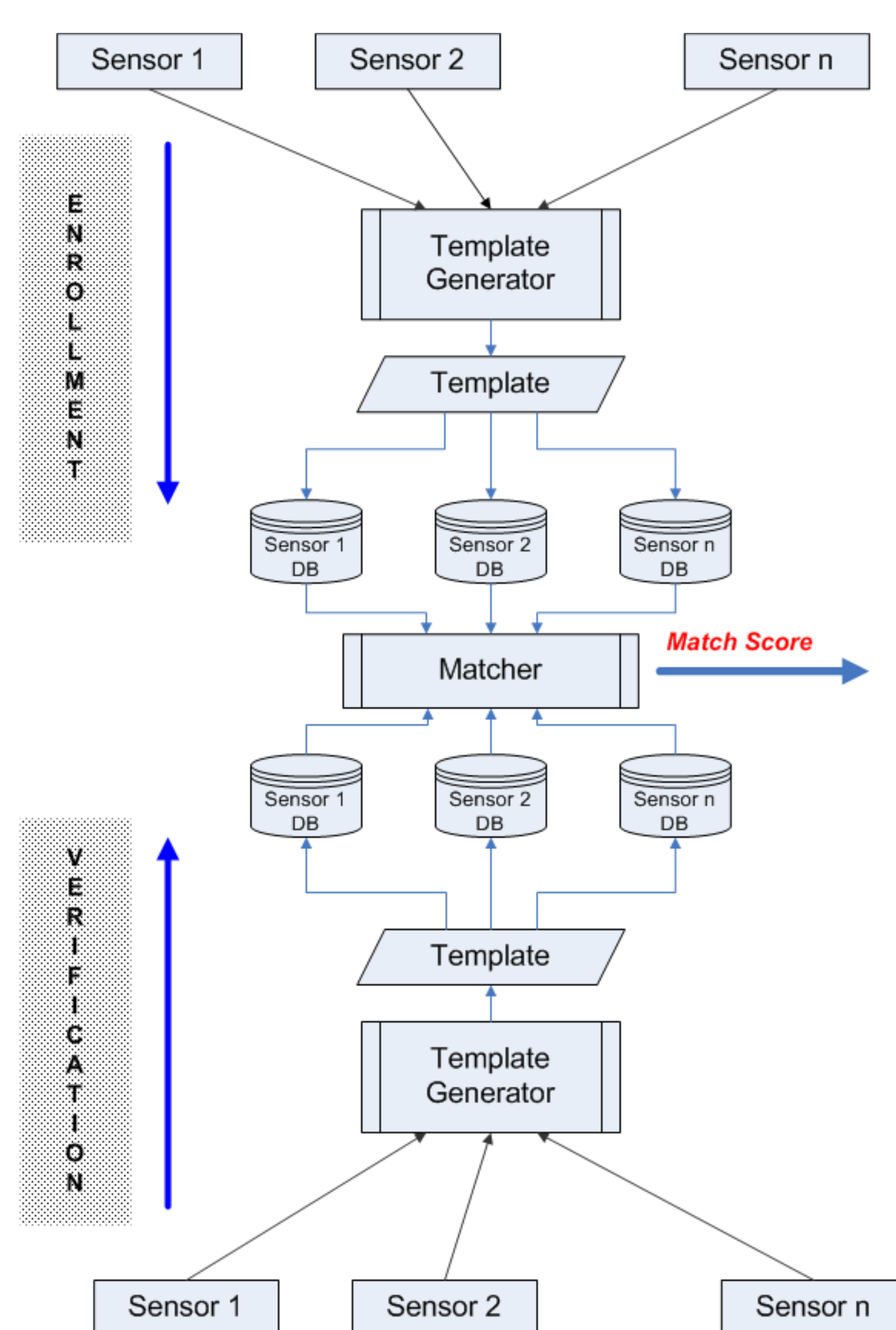
### Significance of Problem



### Experimental Setup

- Collecting live data from approximately 200 participants
- Using 9 different fingerprint sensors
- Includes optical, thermal and capacitive sensors
- Collecting temperature, moisture content, oiliness, and elasticity from skin of finger
- Collecting amount of pressure applied on fingerprint sensors

### Analysis Framework



	Sensor1	Sensor2	.....	Sensorn	
Sensor1	Score <sub>11</sub>	Score <sub>21</sub>	Score	Score <sub>n1</sub>	Enrollment Sensor
Sensor2	Score <sub>21</sub>	Score <sub>22</sub>	Score	Score <sub>n2</sub>	
...					
Sensorn	Score <sub>n1</sub>	Score <sub>n2</sub>	Score	Score <sub>nn</sub>	
	Verification Sensor				

