



## Traceability: The Full Monty



## What is ICA Bremen?

An 'international  
centre of excellence'  
for cotton quality  
testing & research.



# Who is ICA Bremen?

Combining the knowledge  
& expertise of...



## What is traceability?

Traceability is the ability to verify the **history, location,** or **application** of an item by means of documented recorded identification.



# What do companies need?

1. Authentication
2. Identification
3. Quantification
4. Supply chain knowledge



# 1. Authentication



Which is the authentic Ralph Lauren?



## 1.1 Authentication



Which is the authentic Gieves & Hawkes?



## 2. Identification



Is this cotton Egyptian?





## 3. Quantification



Is this cotton **100%** organic?



## 4. Supply chain knowledge



Who made this shirt?



## What is available now?

DNA testing:

1. Authentication ✓
2. Identification ✓
3. Quantification ✗
4. Supply chain knowledge ✗



## How is it measured?

- Requires laboratory testing
- Takes 1-2 weeks
- Costs approx. \$500



## Problems with DNA testing

- ✘ Affected by heavy metal dyes
- ✘ Affected by bleaching process
- ✘ Quantification is inaccurate



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# **ICA Bremen's Traceability Solution**

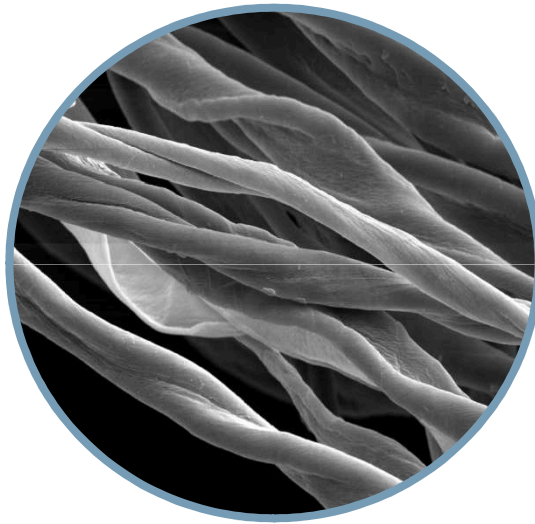


# Traceability solution

1. FibreTrace™ fibres
2. Multiple signatures
3. Scanner



# 1. FibreTrace™





## 2. Multiple signatures

# Signature A

Retailer / brand

Country of origin

Cotton type



## 2. Multiple signatures

Signature B

Cotton type

Grower

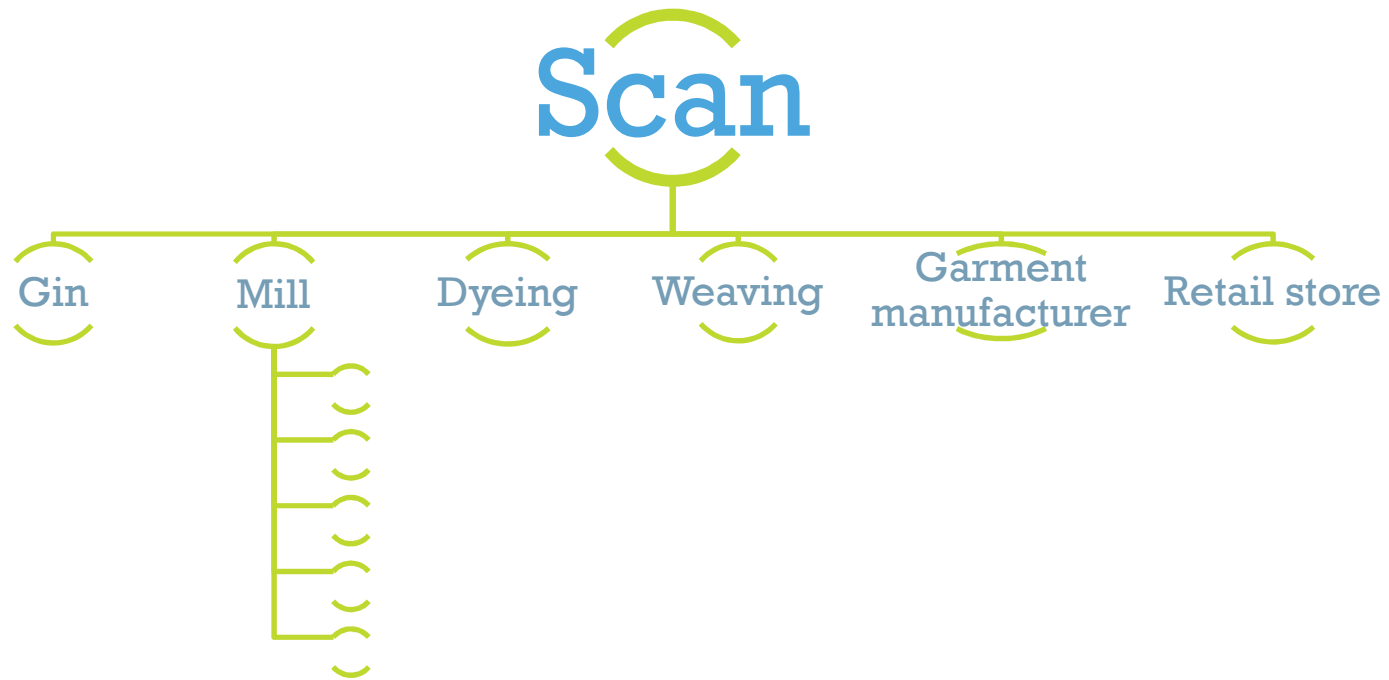


## 3. Scanner

- Uses average of multiple readings
- Produces a percentage of tagged cotton
- Accuracy of + / - 3%
- Uploads to 'cloud' software with each scan
  - Multiple entry points
  - App



## 3. Scanner



## 4. Application

- Gin – Quantification
- Mill – Identification
- Weaving - Authentication
- Garment manufacturer – Authentication



Logistics & security

Controlled by an  
**ICA controller.**



# What do you get?

An integrated package that provides:

- Authentication
- Identification
- Quantification
- The ability to monitor through the supply chain

Along with full logistics and security



## 1. How much does it cost?

- ICA Bremen is not-for-profit
- ICA Bremen aims to make < \$1 per tonne
- Costs will be transparent





## 1.1 How much does it cost?

Based on ICA Bremen charging \$10 per tonne, the unit price **per t-shirt** would be **\$0.0019**.



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**When is it ready?**



Launch

On schedule for:

**October 2017**



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**Thank you.**  
**Any questions?**

