

YIELD OPTIMIZATION | QUALITY CONTROL | STAFF SKILLS

Rian Mc Donnell, CEO

device installed in 2022

devices installed in 2023/24

devices projected in 2025



Elise Weimholt CTO

FLOVISION PRO







Rodney Joyce

Aaron Brown





Lamb

HARDWARE





MACHINE LEARNING







Landy Osias

OPERATIONS

FLOVISION NANO



Weimholt



Boylan

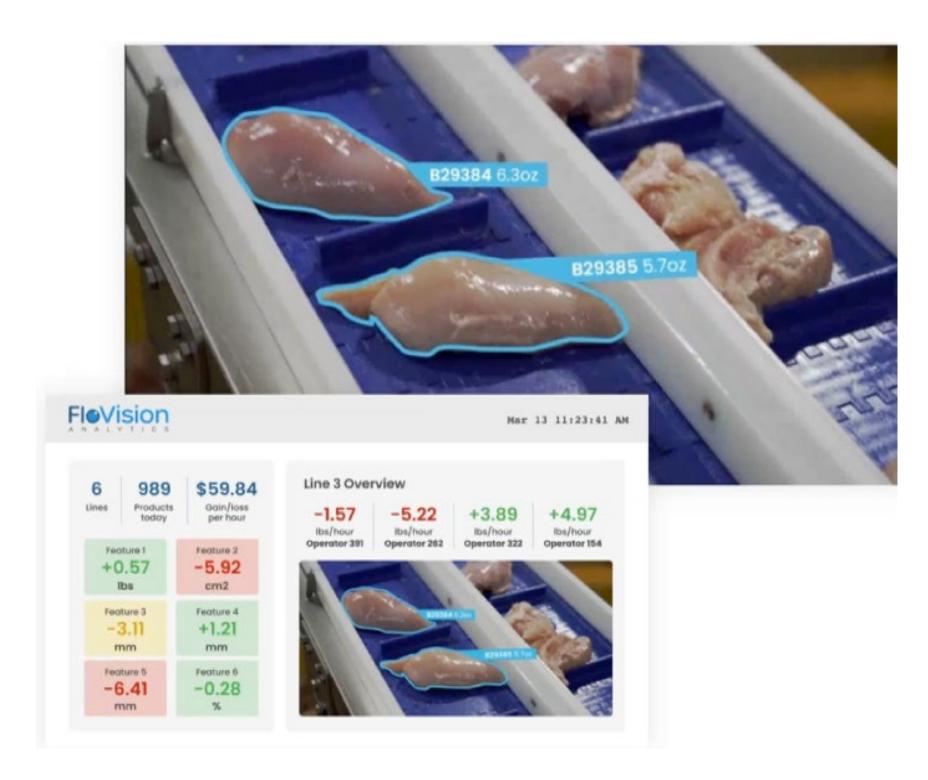




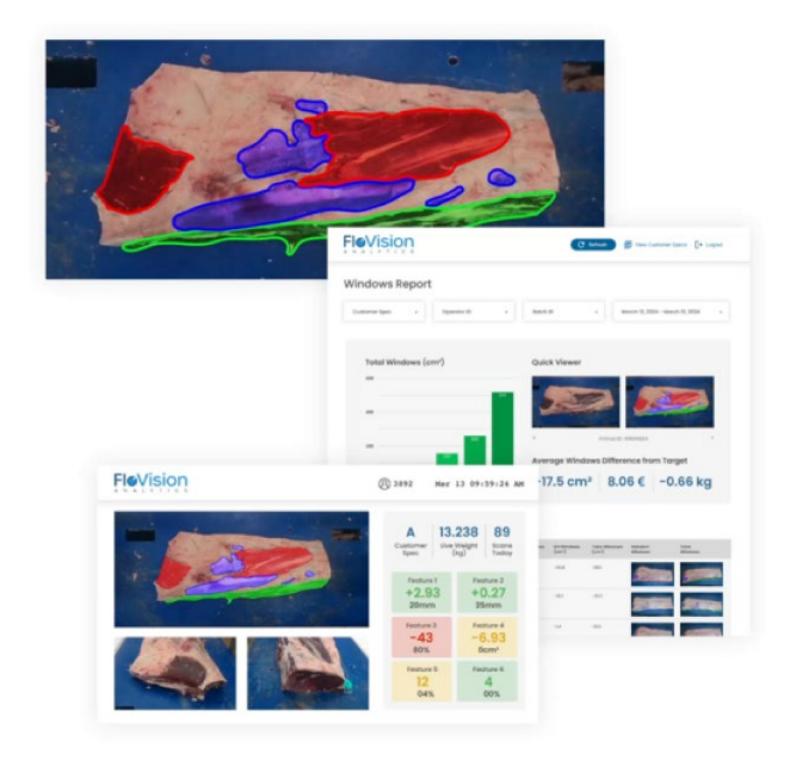
Shannon **Brown**

Solarski

Modular solutions to measure, optimize, and control



FLOVISION NANO



FLOVISION PRO





FloVision ID Fingerprinting



FloVision ID Fingerprinting

- !? What is "Fingerprinting"?
- ? What has FloVision done so far?
- ? Why?
- Next Steps



What is "Fingerprinting"?

"It's like facial recognition for meat"



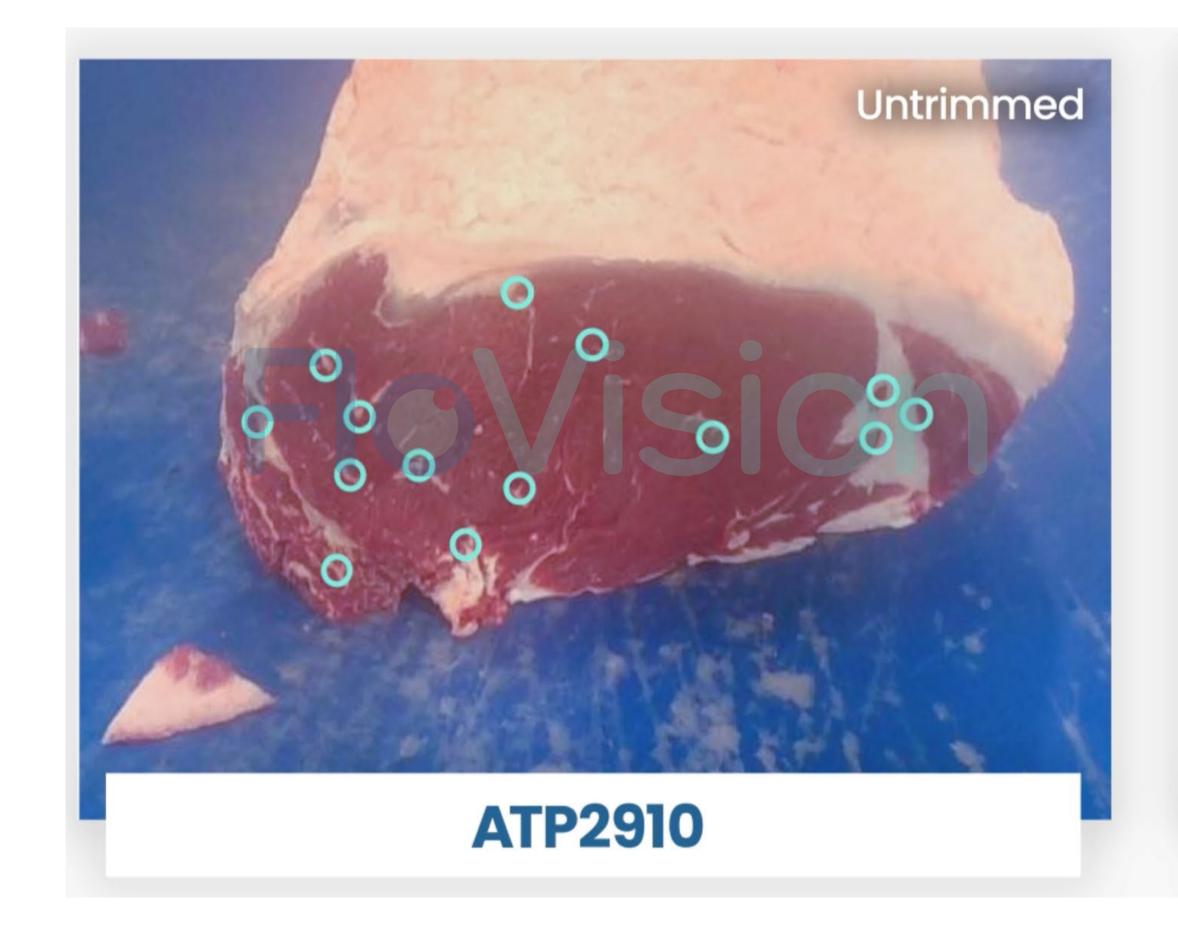
What is "Fingerprinting"?

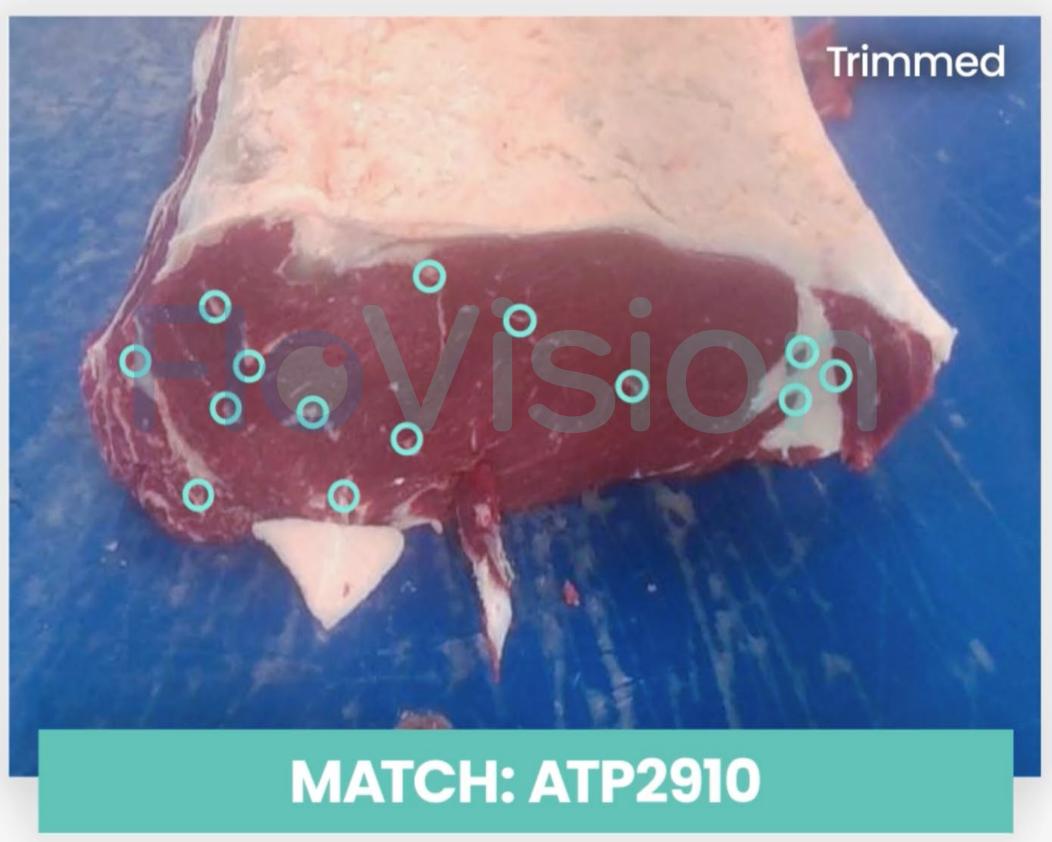




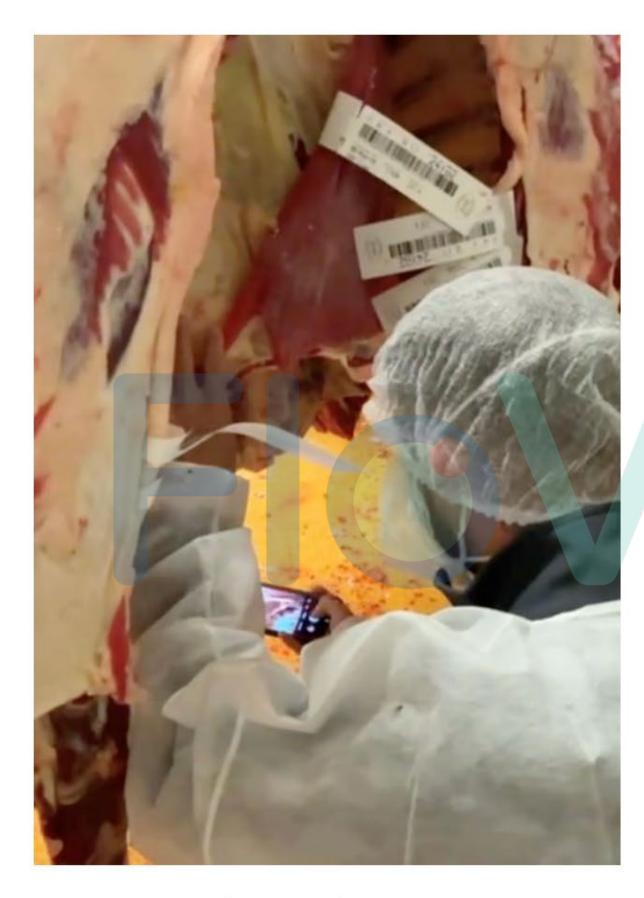


What is "Fingerprinting"?









DC1 Data Collection



DC2 Data Collection





Image 1: Example of strong Positive Pair matching







Image 4: Fingerprinting model correctly not matching different primals (no green lines showing matching keypoints)





Image 2: Fingerprinting model performing well on a primal that has gone through substaintial trimming between DC1 and DC2





Image 3: Fingerprinting model performing well on a primal that has gone through significant transformation including significant trimming of the main eye muscle



Batch	DC1 Images	DC2 Images	Total Number of Pairs	Positive Pairs	False Positives	Missed Pairs
Batch A	88	99	8,712			
Batch B	74	128	9,472		?	
Batch C	65	114	7,410			
Batch D	157	179	28,103			
Batch E	103	123	12,669			



Batch	DC1 Images	DC2 Images	Total Number of Pairs	Positive Pairs	False Positives	Missed Pairs
Batch A	88	99	8,712	37	0	~0
Batch B	74	128	9,472	30	0	~0
Batch C	65	114	7,410	41	0	~0
Batch D	157	179	28,103	79	0	~0
Batch E	103	123	12,669	15	0	~0

76,366 pairs analysed - no errors found



Batch	DC1 Images	DC2 Images	Total Number of Pairs	Positive Pairs	False Positives	Missed Pairs
Batch A	88	99	8,712	37	0	~0
Batch B	74	128	9,472	30	0	~0
Batch C	65	114	7,410	41	0	~0
Batch D	157	179	28,103	79	0	~0
Batch E	103	123	12,669	15	0	~0

~99.99% accuracy on striploins





Go from "Per Batch" to "Per head"



- Yield Optimization
- Quality Assurance
- Recall Efficiency
- Genetics Feedback
- R&D Platform
- Consumer Sentiment



- Yield Optimization
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- Dynamic Assignment per piece
- Primal Mass Balance per head



- Yield Optimization
- **Quality Assurance**
- Recall Efficiency
- Genetics Feedback
- R&D Platform
- Consumer Sentiment

- Full Farm to Fork Traceability
- Dynamic batching to best match specs
- More precise tracing of QA issues



Go from "Per Batch" to "Per Head" Insights

- Yield Optimization
- **Quality Assurance**
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® More targeted recalls (partial batches)



- Yield Optimization
- **Quality Assurance**
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- Yield → Genetics feedback loop
- Quality Genetics feedback loop



- Yield Optimization
- **Quality Assurance**
- Recall Efficiency
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- Enables faster iteration on small batch tests
- Unlocks more granular data to analyse
- Integration with FV Nano, Pro, Analytics and more



- Yield Optimization
- **Quality Assurance**
- Recall Efficiency
- Genetics Feedback
- R&D Platform
- **Consumer Sentiment**

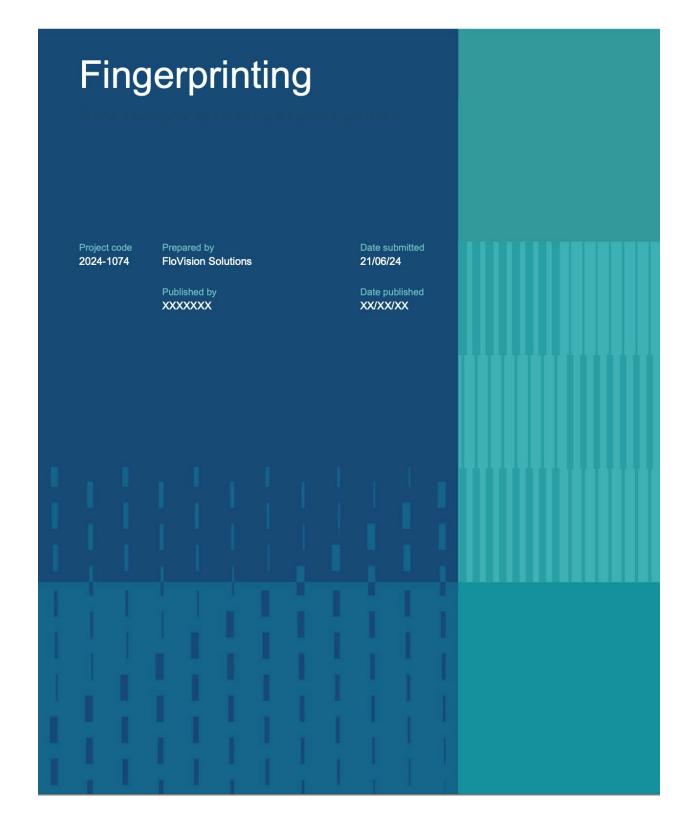
- New Marketing Opportunities
- **Trust** Improving Trust



Next Steps

- Phase 1 (2024) Report Available online
 - Email: rian@flovisionsolutions.com
- Phase 2 (2025) in progress
 - Production implementation
 - Striploins + Ribeyes
 - Subprimal Fingerprinting
 - Box Label Verification









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flovisionsolutions.com

Rian Mc Donnell | rian@flovisionsolutions.com