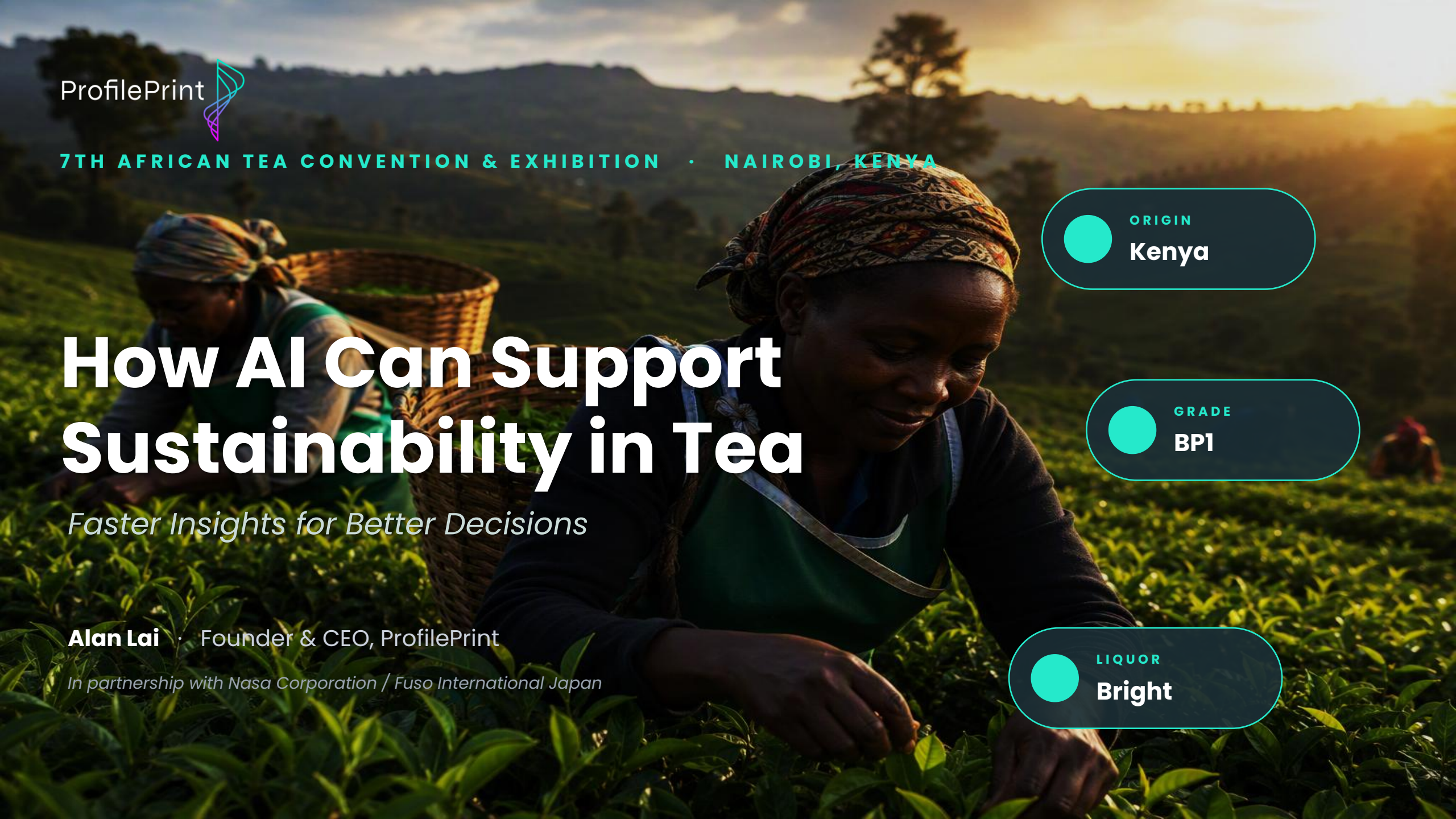


How AI Can Support Sustainability in Tea

Faster Insights for Better Decisions

Alan Lai · Founder & CEO, ProfilePrint

In partnership with Nasa Corporation / Fuso International Japan

WHY IT MATTERS

Tea sustains millions, and rests on a fragile skill

US$70B

global tea market, growing ~5.4%/yr

13M

people employed in tea, 9M are smallholder farmers

#2

most-consumed beverage on earth, after water

THE CHALLENGE

The hidden cost of the way quality is judged today

Every cup depends on decisions across a long, fragmented chain...

Waste & rejection

Quality problems are caught late, good-quality teas are often downgraded or dumped.

Logistics & carbon

Physical samples fly back and forth for weeks before a buying decision is made.

Unfair pricing

Biased grading makes fair price discovery hard, and farmers have to bear the cost.

Ageing expertise

Master tasters, with their scarce craft built over decades, are retiring

These aren't new problems but there is now better ways to solve them.

HOW AI HELPS

A digital fingerprint for every tea

ProfilePrint captures each tea's **molecular fingerprint** and lets AI predict its quality in seconds.

1

Scan

A portable analyser captures the fingerprint in ~10 seconds, at the estate, warehouse or auction floor.

2

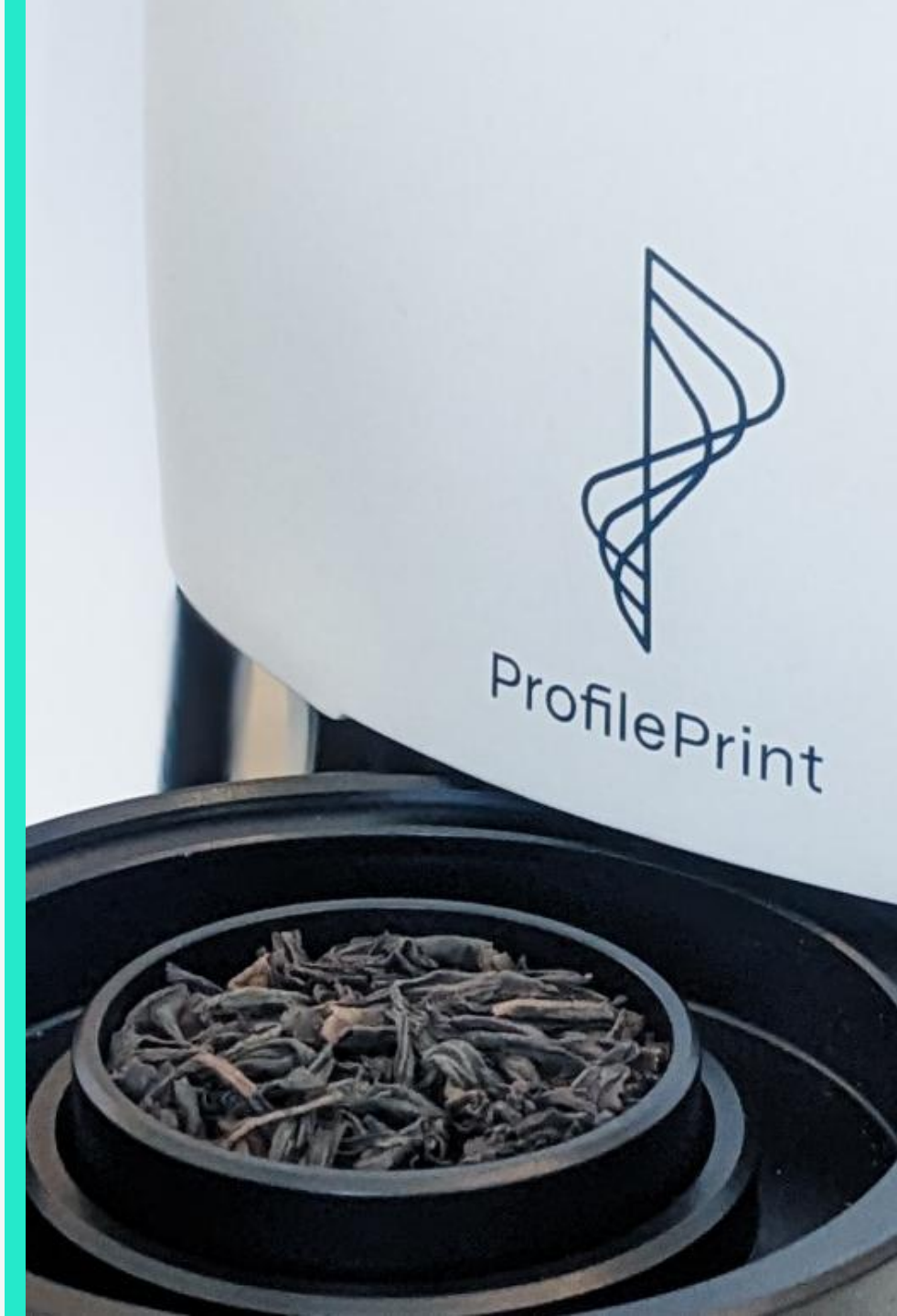
Predict

AI models translate it into sensory scores, grade, origin and pass/fail.

3

Decide

Experts focus on boundary cases; routine screening is automated. Faster, more confident calls.



THE SUSTAINABILITY DIVIDEND

Three ways AI makes tea more sustainable

Objective, instant quality data changes what happens across the whole chain.

01

Less waste

RIGHT-FIRST-TIME QUALITY

Catch issues at the source, before processing and shipping. More tea graded right, far less downgraded or dumped.

02

Leaner logistics

TEST WHERE THE TEA IS

Screen at origin and factory instead of flying samples around, fewer shipments, lower cost and carbon.

03

Fairer pricing

PAY FOR REAL QUALITY

Molecular-based scores reward genuine quality, fairer returns for farmers, more trust for buyers.

Next: one deployment that delivers all three at national scale.

CASE STUDY

From enterprise validation to supplier-network adoption

Digital fingerprints reduce friction before physical samples move

TEA

Multi-factory Deployment



A major Chinese F&B conglomerate in Shanghai scaled ProfilePrint across Xi'an, Guangzhou and Suzhou to drive manufacturing consistency.

*We just won additional 11 deployment tender

COCOA

Global Sourcing & QA Automation



A leading U.S. food manufacturer deployed an operational AI model outside the USA to automate QA and accelerate approvals.

COFFEE

Global Sourcing with Digital Fingerprints



A European coffee conglomerate works with LATAM suppliers to send digital fingerprints before samples, reducing cost, cycle time and improving acceptance.

BUSINESS IMPACT

FEWER PHYSICAL SAMPLES
-60%
Sampling shipments

LOWER QA COSTS
-40%
Sampling & quality costs

FASTER APPROVALS
-30%
Approval cycle time

BETTER QUALITY OUTCOMES
+20%
Acceptance rate

AI OR NOT?

A massive advantage but that comes with real risk

AI excels at the repetitive and data-heavy, but used blindly it can mislead.
The context, judgement and craft ***stays human.***

THE REAL ADVANTAGE

- Recommendations in minutes, not weeks
- Consistent, fatigue-free analysis at scale
- Earlier issue detection and full traceability
- Preserves & scales your experts' own standard

THE RISKS TO MANAGE

- ***"AI tastes better than humans"***

  It learns from your team and applies it consistently. Experts still make the call.

- ***"AI is always right"***

  Good models give confidence levels, so you know when to look deeper.

- ***"Garbage in is fine"***

  Model quality depends on your data. Poor sampling means poor predictions.

WHAT OUR JOURNEY HAS TAUGHT US

Four rules for getting AI right in tea

Across 80+ deployments on six continents, the same principles separate hype from real, sustainable value.

1



Keep humans in the loop

AI screens the routine, high-volume work. Experts own boundary calls and the final decision.

2



Start small, prove fast

~30 well-chosen samples can build a working model. Begin on a couple of SKUs, then scale on evidence.

3



Your data is the asset

Consistent sampling and your panel's own scores are what make models trustworthy. Quality in, quality out.

4



Digitalise the standard

Institutionalize your expertise, turn tacit craft into a living standard you own and improve.

THE TIME IS NOW

The edge goes to those who pair craft with data

Early movers gain a durable, sustainable advantage

40%

less time spent on quality testing

50%

less waste & higher goods acceptance

8×

faster tea assessment for expert teams

80+

deployments across six continents

Models already span teas from East African, Sri Lankan, Indian, China etc.

Honour the timeless craft, now powered by data

AI doesn't replace the master taster, it scales their standard and gives every buyer and every seller confidence of a fair decision.

Start a pilot on 2 SKUs and see results immediately

Let’s chat at Booth 30!

Alan Lai · Founder & CEO, ProfilePrint · profileprint.ai

With appreciation to Suzuki-san & the Nasaco / Fuso team, and the African Tea Convention 2026 organisers.

