

Produce Pics

Blockchain and AI integrated Image and Smart contract
Processing Platform for the Produce Industry

www.producepics.com

Introduction

Produce (Fruits and Vegetables) is a very large industry: over 100 Billion in annual sales in the US alone.

40% of fruits and vegetables grown is wasted.

Trading of produce in the US is governed by the Perishable Agricultural Commodities Act (PACA) . PACA allows for “flexible” pricing terms tied to quality.

In simple terms:

Shelf-life of strawberries : 12 days.

Typical transportation time: 5 days.

Price at any point (along the supply chain) is tied to the quality of the product at that point.

Grower in California ships “Grade A” product.

(after 4 days), Distributor in the mid-west thinks it is “Grade C”.

How to settle the “difference” (or “dispute”?)

Call a USDA Inspector, determine grade, and then the price.

Current Produce Supply Chains are quite complex!



Simplified view of a multi-layer produce supply chain



Many days of effort, wait-times, several communication cycles, and higher costs to achieve consensus about “quality” of the produce.

USDA Inspections : what grade/quality is the produce?

 U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE http://FPBInspections.ams.usda.gov		INSPECTION CERTIFICATE		T-007-0209-07797
		PAGE 1 of 1		
CARRIER or LOT ID: PO 56206		APPLICANT: [REDACTED]		REQUESTED: 2/15/2019 11:02 AM
LOADING STATUS: UNLOADED		SHIPPER: [REDACTED]		STARTED: 2/15/2019 5:27 PM
STATED BY: APPLICANT		RIO RICO, AZ		COMPLETED: 2/15/2019 6:01 PM
ADDITIONAL ID: NA				PASSWORD FOR ONLINE ACCESS [REDACTED]
CARRIER TYPE: NA		MARKET OFFICE: CINCINNATI, OH		
REFRIG UNIT: NA	DOORS: NA	INSP SITE: APPLICANT'S WAREHOUSE		ESTIMATED FEE: \$262.70
REMARKS: [REDACTED] Delay & Cost				

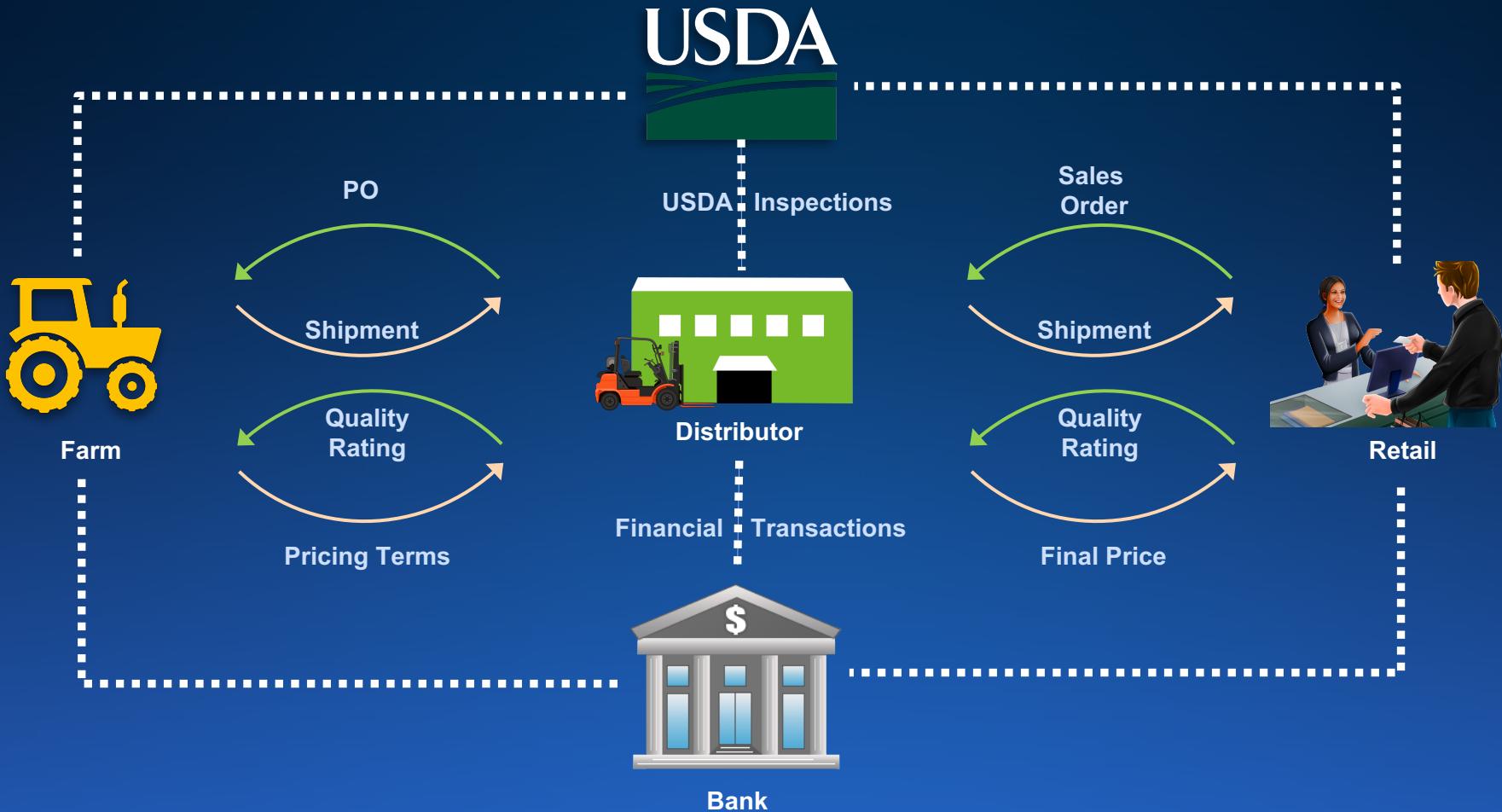
LOT A (QAC) - PEPPERS, SWEET

TEMP: 41° to 43°F	INSP CT: YES	NUMBER OF CONTAINERS: 400 CARTON(S)	ORIGIN: MX
MARKINGS: BRAND: LLANO MARKINGS: PRODUCT OF MEXICO, PEPPER/GRN SH YELLO LOMAS CHILERAS SA DE CV., GUAYMAS, SONORA MEXICO,		DISTRIBUTED BY TRUFRESH NOGALES, AZ, AGRICOLA	
PLI: NONE		OTHER ID: 4665	

INJURY	DAM	SER DAM	V.S. DAM	OFFSIZE/DEFECTS
NA	3	0	NA	QUALITY DEFECTS (0 to 11%)(SCARS, MECHANICAL INJURY)
NA	19	19	NA	DECAY OF STEM (6 to 32%)
NA	4	4	NA	DECAY OF WALLS AND CALYX (0 to 16%)
NA	26	23	NA	CHECKSUM
GRADE:	FAILS TO GRADE U.S. NO. 1 YELLOW ACCOUNT CONDITION.			Fails to Grade US # 1

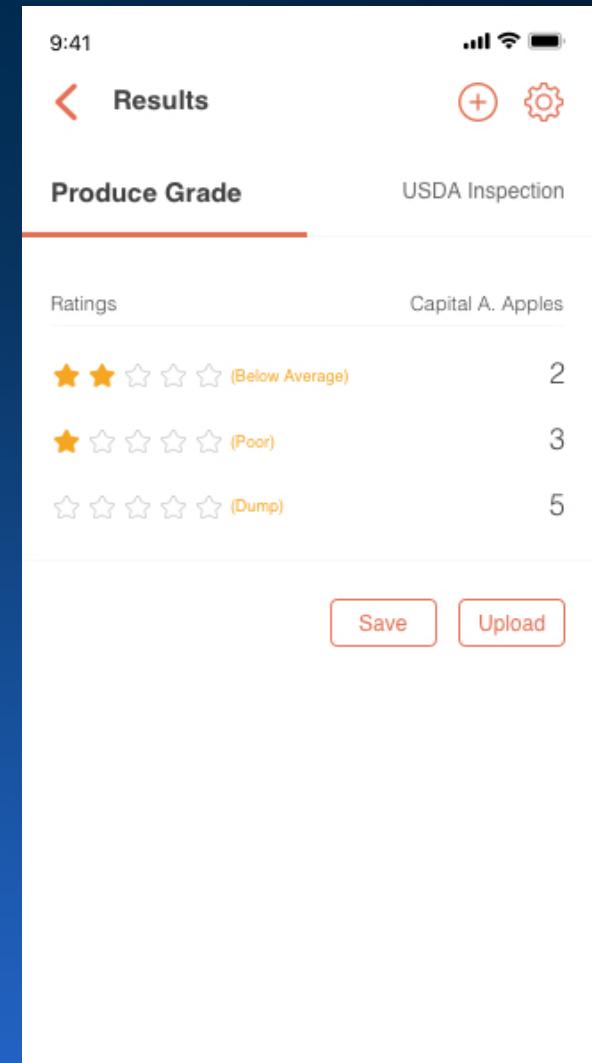
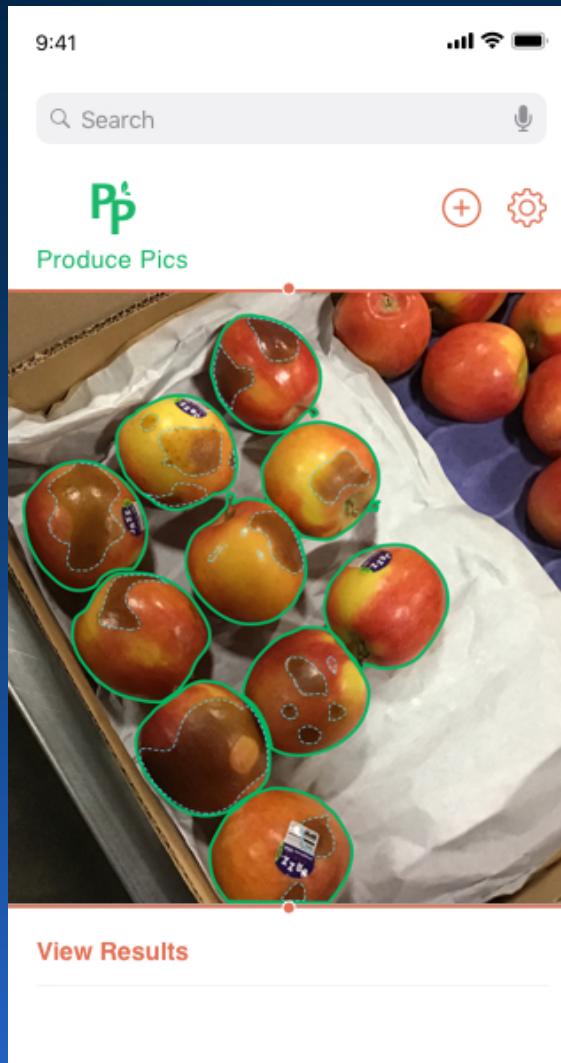
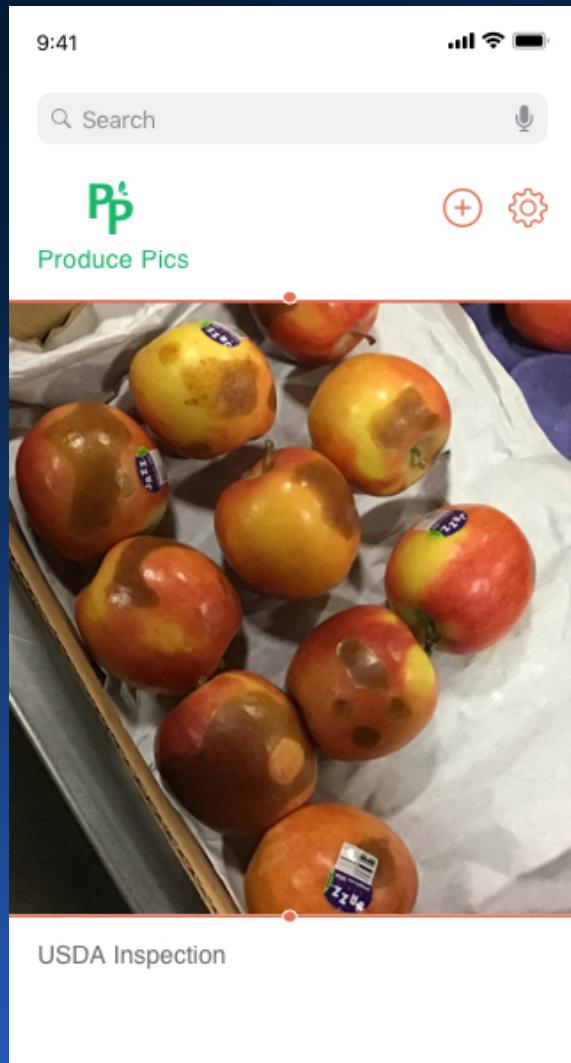
Grower -> Packer (Mexico) -> Exporter (Mexico) -> Importer (US) -> Distributor -> Retail

Blockchain (synchronized consensus) to the rescue!



Cuts down 4-5 days of negotiations to a few minutes and the cost from around \$ 250 per inspection to under \$ 25.

Product : Sample Screenshots (of image processing app)



Leveraging existing technologies: Image + Barcode



July 11, 2018 12:32:40 PM



First (and only) app to include both image and GS1 compliant barcodes

Even the smallest farmer can utilize the app at no additional cost

Can be used to estimate both quality and remaining shelf life

Hyperspectral imaging to be introduced in 18 to 24 months.

AI frameworks provide APIs for both image processing and bar-code handling capabilities.

Tracking Barcodes

Two barcode scans of a case of tomatoes (shipment),
at two different locations (along the supply chain),
Taken seven days apart.



Tracking Barcodes and Images



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(01) 00614141007349 (13) 170709 (10) FL094529JL

TOMATOES / ROMA

5 - 5 LBS. = 25 LBS,
US #1

Product of USA

Tomato Farms
Lakeland, FL



6 1414100734 63 61



July 18, 2018 02:42:48 PM



(01) 00614141007349 (13) 170709 (10) FL094529JL

TOMATOES / ROMA

5 - 5 LBS. = 25 LBS,
US #1

Product of USA

Tomato Farms
Lakeland, FL



6 1414100734 63 61

Landscape



Potential partner

