



A vision for the New Retail 2017

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BEFORE VISPERA



2006

PROF. ERÇİL
FOUNDED
VISTEK

2009

ISRA VISION AG
BECAME A
PARTNER OF
VISTEK



2013

EXIT TO
ISRA VISION AG
with 28X
MULTIPLIER

2014

PROF. ERÇİL &
DR. AKGÜL
FOUNDED
VISPERA

NATIONAL AND
INTERNATIONAL
AWARDS DURING
THIS PERIOD





TARGET PAIN POINTS AND VISPERA SOLUTIONS

PAIN POINTS WE ADDRESS



Out of Stock

Planogram Compliance

Tracking Share of Shelf

Category Management

Getting the exact store space you paid for

Following competitors' moves

Shelf Disordered

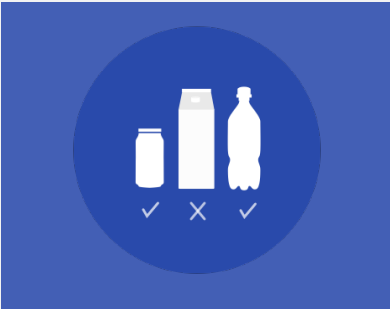
Scoring Field Teams



PAIN POINTS



OUT OF STOCK



1.75 \$ tn

loss globally
due to
out of stock

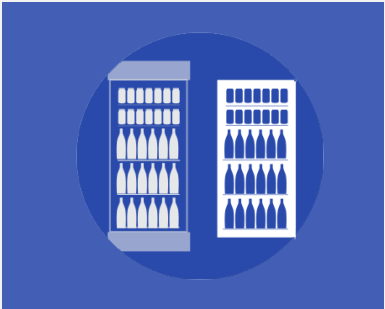
26%

of customers
buy another brand
when a product is
Out Of Stock

31%

buy the item
at another store

PLANOGRAM COMPLIANCE



7.8%

potential
increase in
annual sales

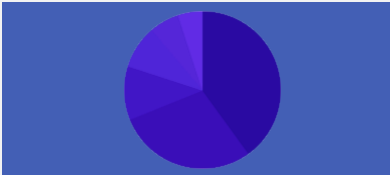
8.1%

potential lift
in profit

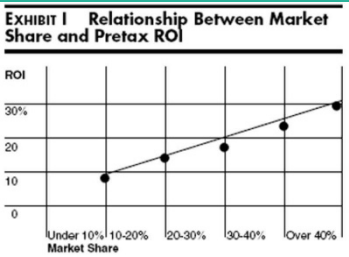
10-15 \$ bn

lost
sales opportunity

SHELF SHARE



Cannot be kept at agreed levels
Positively correlated with profitability



PAIN POINTS: FROZEN ITEM CABINETS



Additional Requirements

Price card visibility

Magnum-Cornetto-Snacking-Max

Planogram sticker on the cabinet

Promotion and proposition visibility

Alien product check

Iceness check

Posters presence and relevance



THE SECTOR'S ANSWER TO THE PAIN POINTS



Hosting hundreds of field agents to visit stores periodically and doing the necessary checks



COCA COLA

800 merch + sales rep



PHILIP MORRIS

400 merch,
1300 sales rep
+ 3rd party



PEPSI and FRITO LAY

900 sales rep



P&G

600 merch

PROBLEMS WITH MANUAL SOLUTION



TIME CONSUMING



INACCURATE



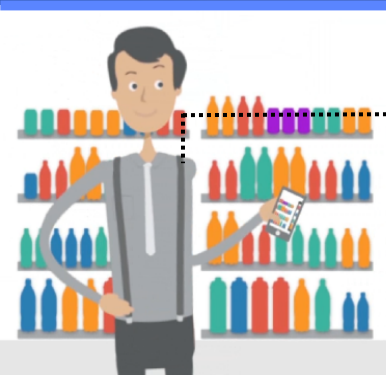
NOT DETAILED




NOT ACTIONABLE

VISPERA TECH : OUR ANSWER TO THE PAIN POINTS



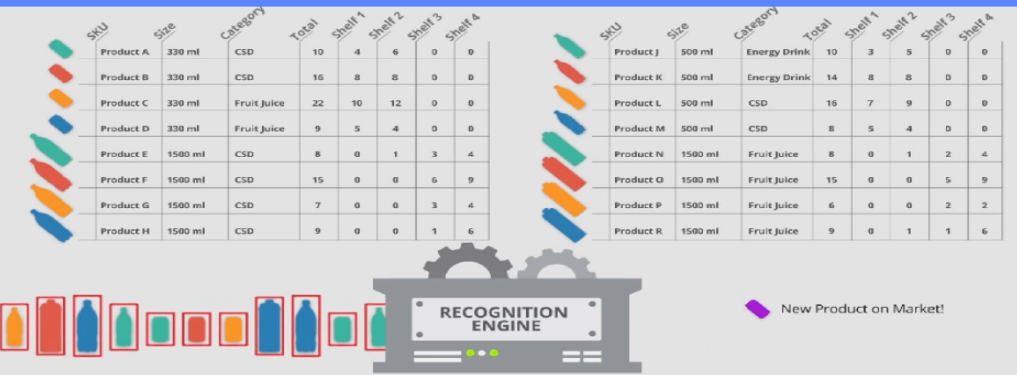


The images are processed in Vispera Cloud Servers



CAPTURE

Vispera Shark




RECOGNIZE

Vispera Image Recognition

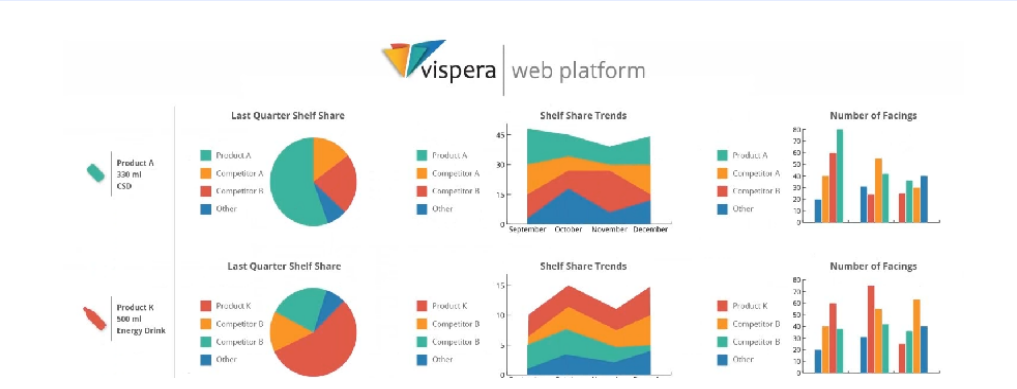
| SKU | Size | Category | Total | Shelf 1 | Shelf 2 | Shelf 3 | Shelf 4 |
|-----------|---------|-------------|-------|---------|---------|---------|---------|
| Product A | 330 ml | CSD | 10 | 4 | 6 | 0 | 0 |
| Product B | 330 ml | CSD | 16 | 8 | 8 | 0 | 0 |
| Product C | 330 ml | Fruit Juice | 22 | 10 | 12 | 0 | 0 |
| Product D | 330 ml | Fruit Juice | 9 | 5 | 4 | 0 | 0 |
| Product E | 1500 ml | CSD | 8 | 0 | 1 | 3 | 4 |
| Product F | 1500 ml | CSD | 15 | 0 | 0 | 6 | 9 |
| Product G | 1500 ml | CSD | 7 | 0 | 0 | 3 | 4 |
| Product H | 1500 ml | CSD | 9 | 0 | 0 | 1 | 6 |

| SKU | Size | Category | Total | Shelf 1 | Shelf 2 | Shelf 3 | Shelf 4 |
|-----------|---------|--------------|-------|---------|---------|---------|---------|
| Product J | 500 ml | Energy Drink | 10 | 3 | 5 | 0 | 0 |
| Product K | 500 ml | Energy Drink | 14 | 8 | 8 | 0 | 0 |
| Product L | 500 ml | CSD | 16 | 7 | 9 | 0 | 0 |
| Product M | 500 ml | CSD | 8 | 5 | 4 | 0 | 0 |
| Product N | 1500 ml | Fruit Juice | 8 | 0 | 1 | 2 | 4 |
| Product O | 1500 ml | Fruit Juice | 15 | 0 | 0 | 5 | 9 |
| Product P | 1500 ml | Fruit Juice | 6 | 0 | 0 | 2 | 2 |
| Product R | 1500 ml | Fruit Juice | 9 | 0 | 1 | 1 | 6 |



VALIDATE

Vispera Operators



ANALYZE

Vispera Ocean

Last Quarter Shelf Share

Product A 330 ml CSD

Product K 500 ml Energy Drink

Shelf Share Trends

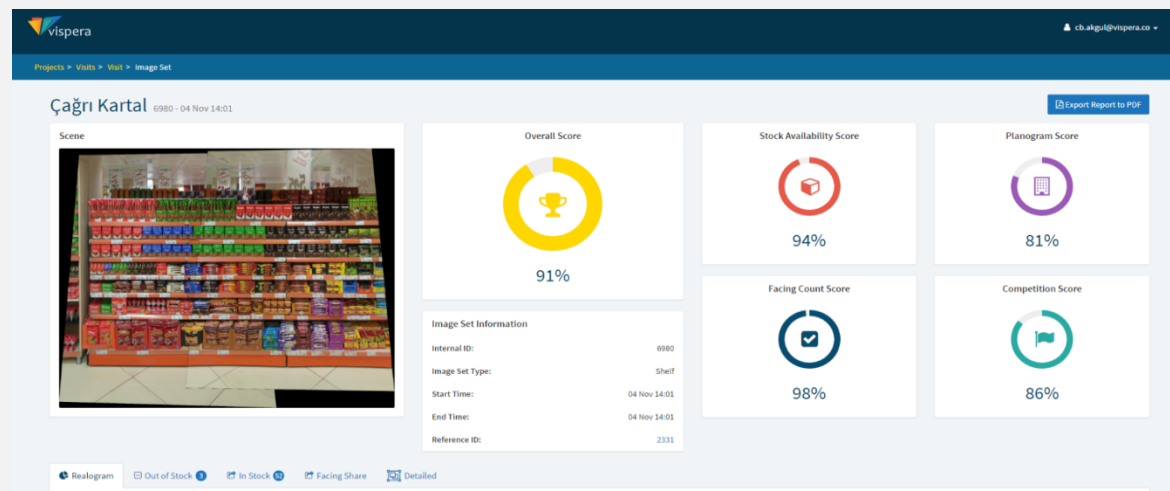
Number of Facings

> 99% accuracy, SKU level detail, near real time

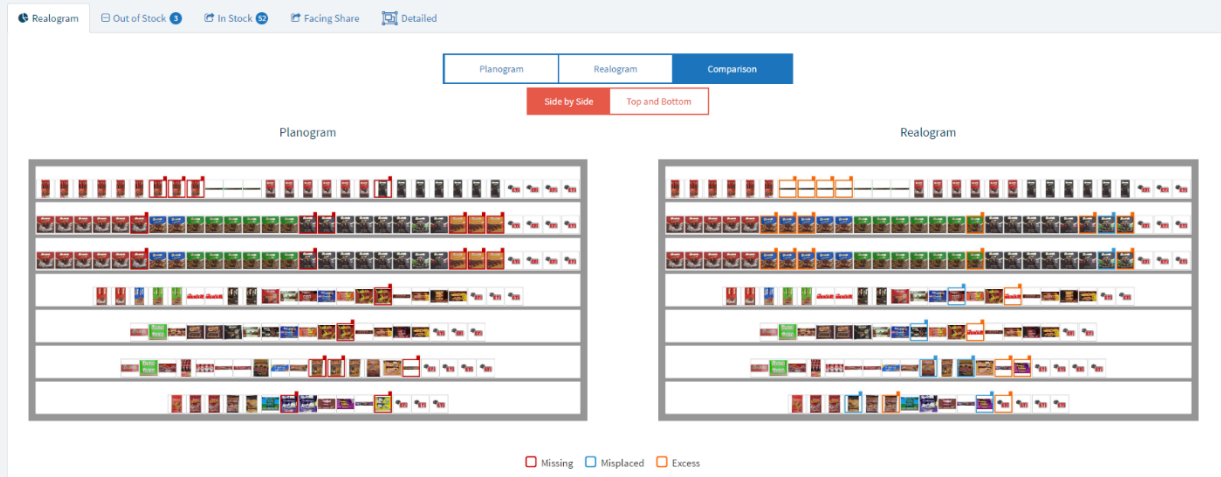


SAMPLE REPORTS

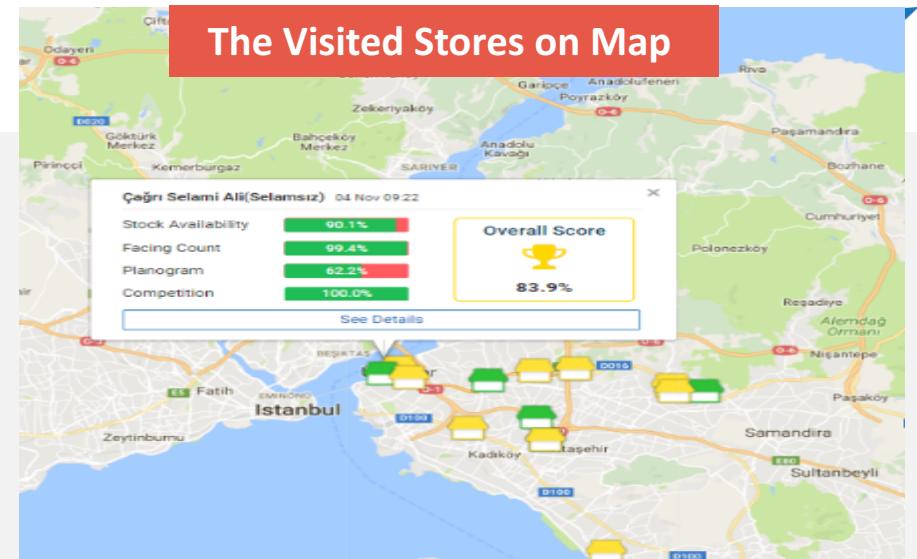
Summary of KPI's at Store Level



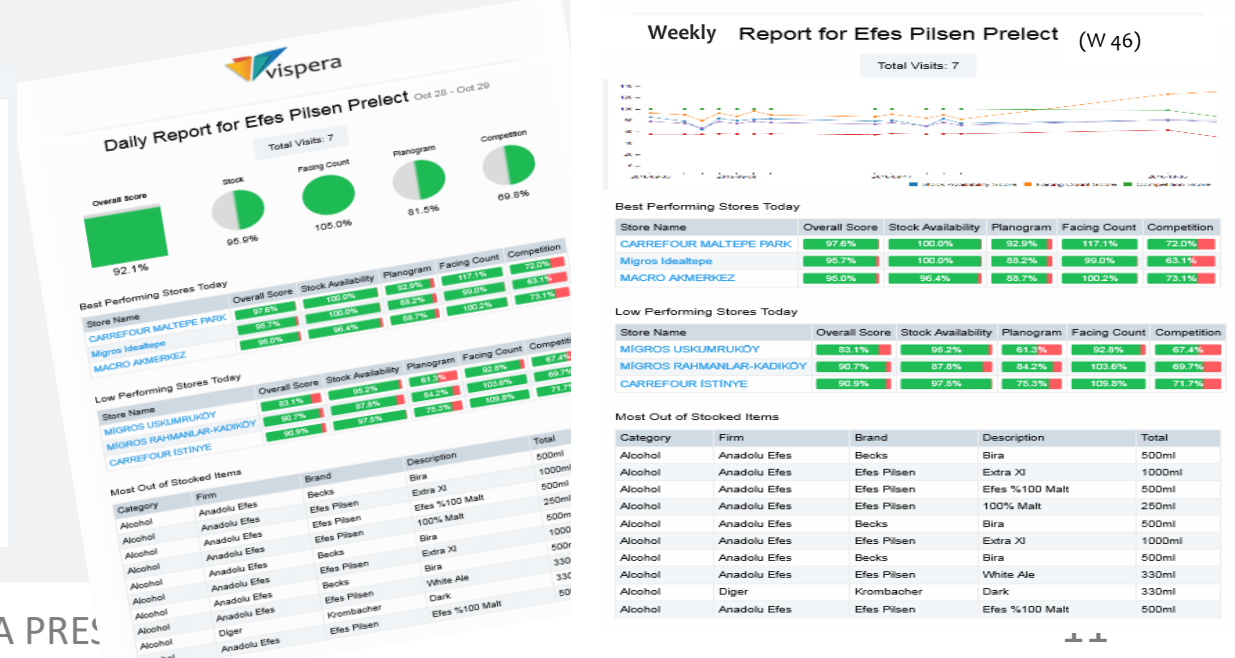
Visual Planogram Analysis



The Visited Stores on Map



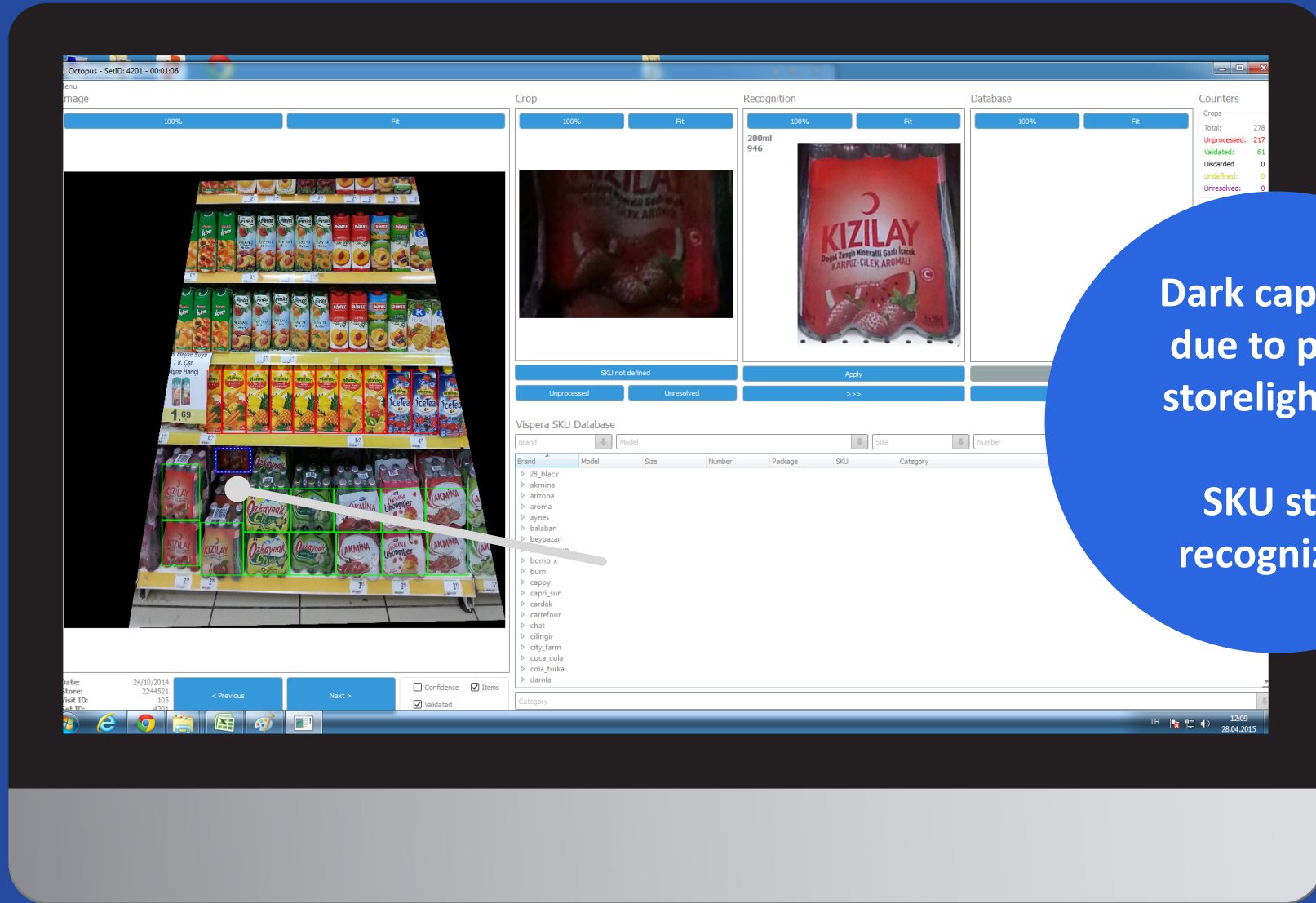
Daily, weekly and monthly reports



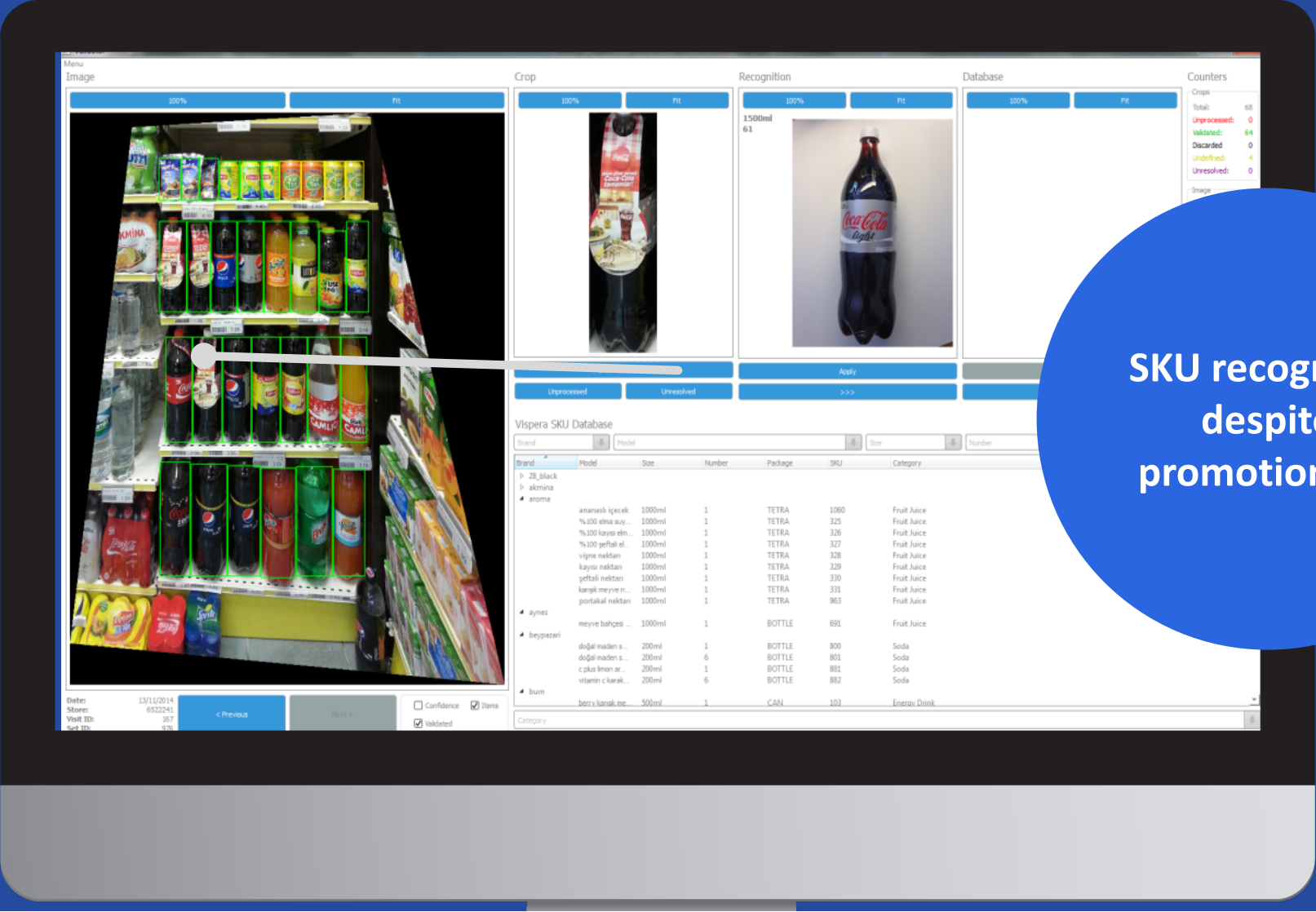


EXAMPLES FROM THE FIELD

VISUAL RECOGNITION EXAMPLES



VISUAL RECOGNITION EXAMPLES



SKU recognized
despite
promotion tag

VISUAL RECOGNITION EXAMPLES



Menu

Image

100%

Fit

Crop

100%

Fit

Recognition

100%

Fit

Database

100%

Fit

Counters

Crops

Total: 68

Unprocessed: 0

Validated: 64

Discarded: 0

Unresolved: 4

Unresolved: 0

Unprocessed

Unresolved

Apply

>>>

Vispera SKU Database

Brand

Model

Size

Number

Package

SKU

Category

> 25_black

> aroma

anemesh icecek

1000ml

1

TETRA

1060

Fruit Juice

%100 elmas su...

1000ml

1

TETRA

325

Fruit Juice

%100 kaynar el...

1000ml

1

TETRA

326

Fruit Juice

%100 portali el...

1000ml

1

TETRA

327

Fruit Juice

vizne mektan

1000ml

1

TETRA

328

Fruit Juice

kaynar mektan

1000ml

1

TETRA

329

Fruit Juice

gettali mektan

1000ml

1

TETRA

330

Fruit Juice

kaynar meyve m...

1000ml

1

TETRA

331

Fruit Juice

portali mektan

1000ml

1

TETRA

963

Fruit Juice

aynes

meyve bahces...

1000ml

1

BOTTLE

691

Fruit Juice

breypetari

dogal maden s...

200ml

1

BOTTLE

800

Soda

dogal maden s...

200ml

6

BOTTLE

801

Soda

c plus limon ar...

200ml

1

BOTTLE

881

Soda

vitamin c karak...

200ml

6

BOTTLE

882

Soda

burn

berry karak me...

500ml

1

CAN

103

Enerji Drink

Category

Datlar

13/11/2014

6022241

357

676

< Previous

Next >

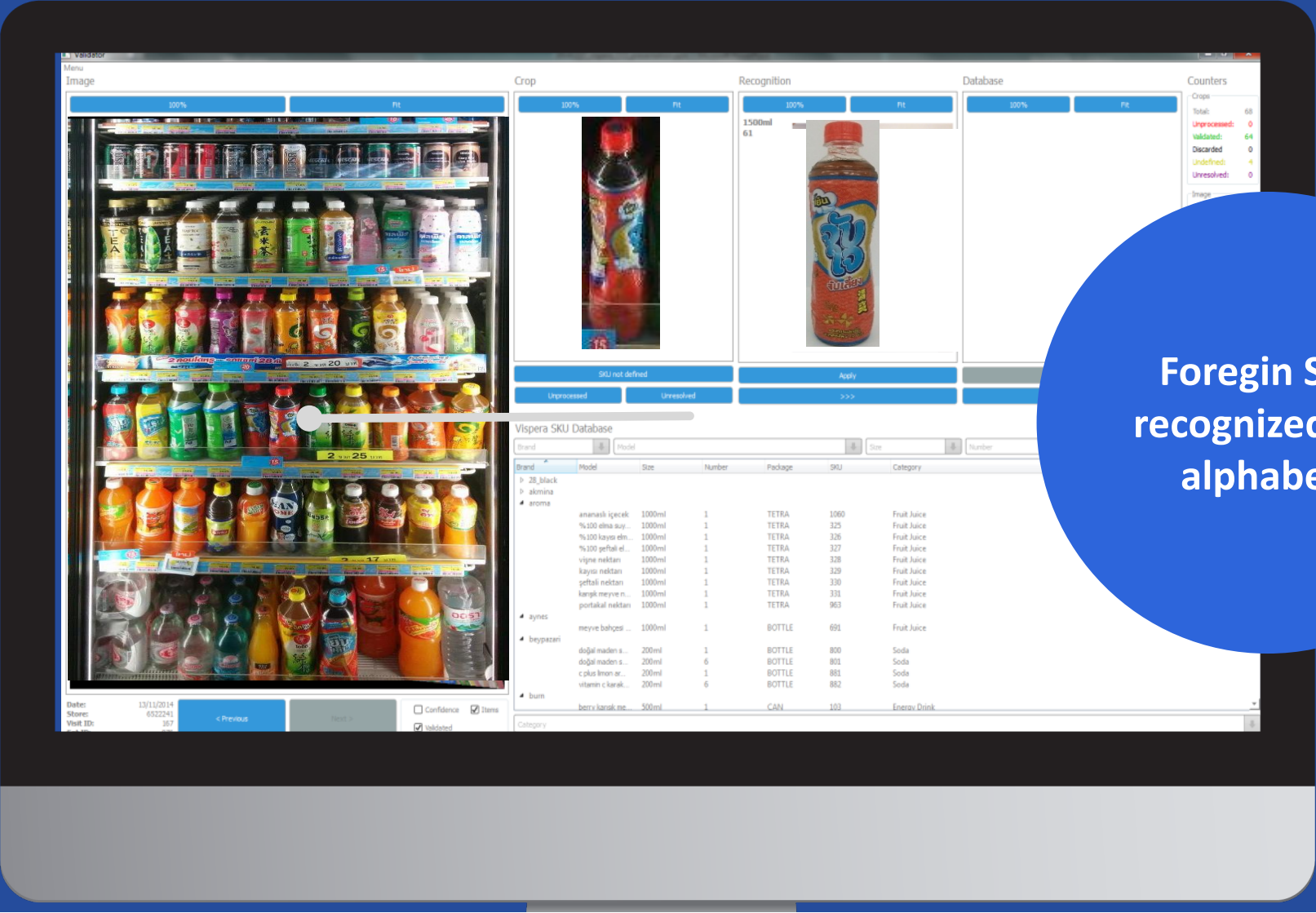
☐ Confidence

☒ Items

☒ Validated

SKU recognized despite flexible packaging and shining

VISUAL RECOGNITION EXAMPLES



Foregin SKU
recognized (Tai
alphabet)



THE CORE TEAM

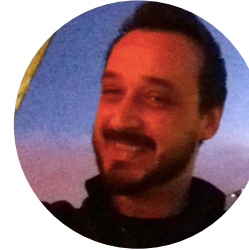
VISPERA MANAGEMENT TEAM



Prof. Aytül Erçil

Co-Founder and CEO

Network Faculty at Sabancı University
Founder of Vistek ISRA Vision
Award-winning Endeavor Entrepreneur
Formerly Faculty at Boğaziçi Uni.
PhD in Applied Math (Brown Uni.)
*Computer Vision, Pattern Recognition,
Applied Math and Statistics*
130+ publications and 3 patents in these areas



Ceyhun Burak Akgül, PhD

Co-Founder and CTO

Adjunct Faculty at Boğaziçi University. EE Dept.
Formerly R&D Director at Vistek ISRA Vision
Formerly EU Marie Curie PostDoc (Philips Research)
PhD in EE (Télécom ParisTech and Boğaziçi Uni.)
*Computer Vision, Machine Learning, Data Mining,
Visual Search and Retrieval, Action Recognition*
30+ publications and 1 patent in these areas



Yağmur Avni Tatay

Operations Manager

Over 20 years of experience in
deploying software internationally,
managing international software teams
(in the U.S. and in India) and
software operations



Didem Çelikkanat Ozan, Ph.D.

Global Accounts Manager, FMCG

Over 10 years of experience in
international projects management,
experience in FMCG industry.



Akan Gurler

Business Development Manager

Over 25 years of experience in
retail industry in companies like
Real, Carrefour, Tansas, Goldas
in C level positions.



Başak Aydın

**Administrative
Manager**

Over 10 years of experience in
HR, finance and general
administration management.

VISPERA INNOVATION TEAM



Erdem Yörük, PhD

Chief Scientist

Formerly PostDoc at Johns Hopkins CflS
PhD in Applied Math (Johns Hopkins University)
20+ publications in these areas



Kaan Can Fidan, MS

Senior Research Engineer

Formerly R&D Director at Vistek ISRA Vision
MS in Mechatronics (Sabancı Uni.)
*Robotics, Image Processing, 3D Vision,
Software Dev. Machine Learning,
10+ publications in these areas*



Kaan Öner, MS

Senior Research Engineer

Formerly Res. Eng. at Vistek ISRA Vision
MS in Mechatronics (Sabancı Uni.)
*Robotics, Imaging and Lighting Design,
Image Processing, 3D Vision, UI/UX Design,
10+ publications in these areas*



Levent Özyıldırım, BS

Senior Software Engineer

Formerly Soft. Eng. at Vistek ISRA Vision
BS in CMPE (Istanbul Technical University)
*Software Arch. Design and Dev.
C++/C#/Java Programming, Database Arch.
Web Programming, Mobile Apps*

VISPERA INNOVATION TEAM



Melih Değiş, BS
Software Engineer

BS in Computer Science (Bilgi University)
Backend Development, DevOps, Unix-like
Operating Systems, Cross-platform
Applications, Functional Programming,
Machine/Deep Learning, Artificial Intelligence



Mehmet Koloğlu, BS
Software Engineer

BS in Computer Science (Kalamazoo Coll.)
Cloud Services, Mobile Apps,



Başak Baran
UI/UX Designer

MA in Visual and Media Arts (Emerson College)
BA in Sociology (METU)
Over ten years of experience in
Visual Design, Information Architecture, User
Testing, User Experience Design



Selin Özenç, BS
Data Management

BS in Computer Engineering (Çankaya University)
SQL query, project & DB configuration & maintenance



Kemal Akkoyun, MS
Senior Software Engineer

MS Student in Computer Engineering (Boğazici Uni)
BS in Computer Science (Bilgi University) 1. of his class
Cloud Services, Software Arch. Design Patterns,
Mobile Apps, Database Arch., Computing Theory,
Recommender Systems, Machine Learning



Abdullah Mara
Frontend Developer

ADVISORY BOARD



Karaca Kestelli

Chief Strategy Officer, Yıldız Holding
(formerly CEO of Bain Consulting)



Kerem Göktan

Partner at Standart Unlu, Board Member at Şok Market Chain



Osman Ünsal

Former CEO of Esas Holding



COMPETITIVE LANDSCAPE

COMPETITION



TRAX

(2010)

Singapore
R&D: Israil

37 M USD raised since 2010

PLANORAMA

(2009)

France
R&D: Budapest

Partnership with Smollan Group in 2013
Investment by Kantar Retail in 2014

NEXIUM

(2010)

Spain

Acquired by...

ACCENTURE

COMPETITION



| | RECOGNITION ACCURACY | ON PREMISE SOLUTION FOR RETAILERS | ICECREAM CABINET | CATEGORIES PROCESSED |
|-----------|-------------------------|---|---------------------|-----------------------------------|
| TRAX | low | NO | NO | Softdrinks and easy categories |
| PLANORAMA | high | NO | NO | Softdrinks and easy categories |
| VISPERA | high | YES | YES | Virtually all categories |

FMCG PRODUCT CATEGORIES TESTED WITH VISPERA SOFTWARE



Ice Cream
Freezers&Cabinets



Ice Cream
Freezers&Cabinets



Soft Drinks
Shelves&Coolers



Chocolate



Biscuits



Chocolate



Spices



Diapers



Oils



Household



Pulses & Rice



Health & Beauty

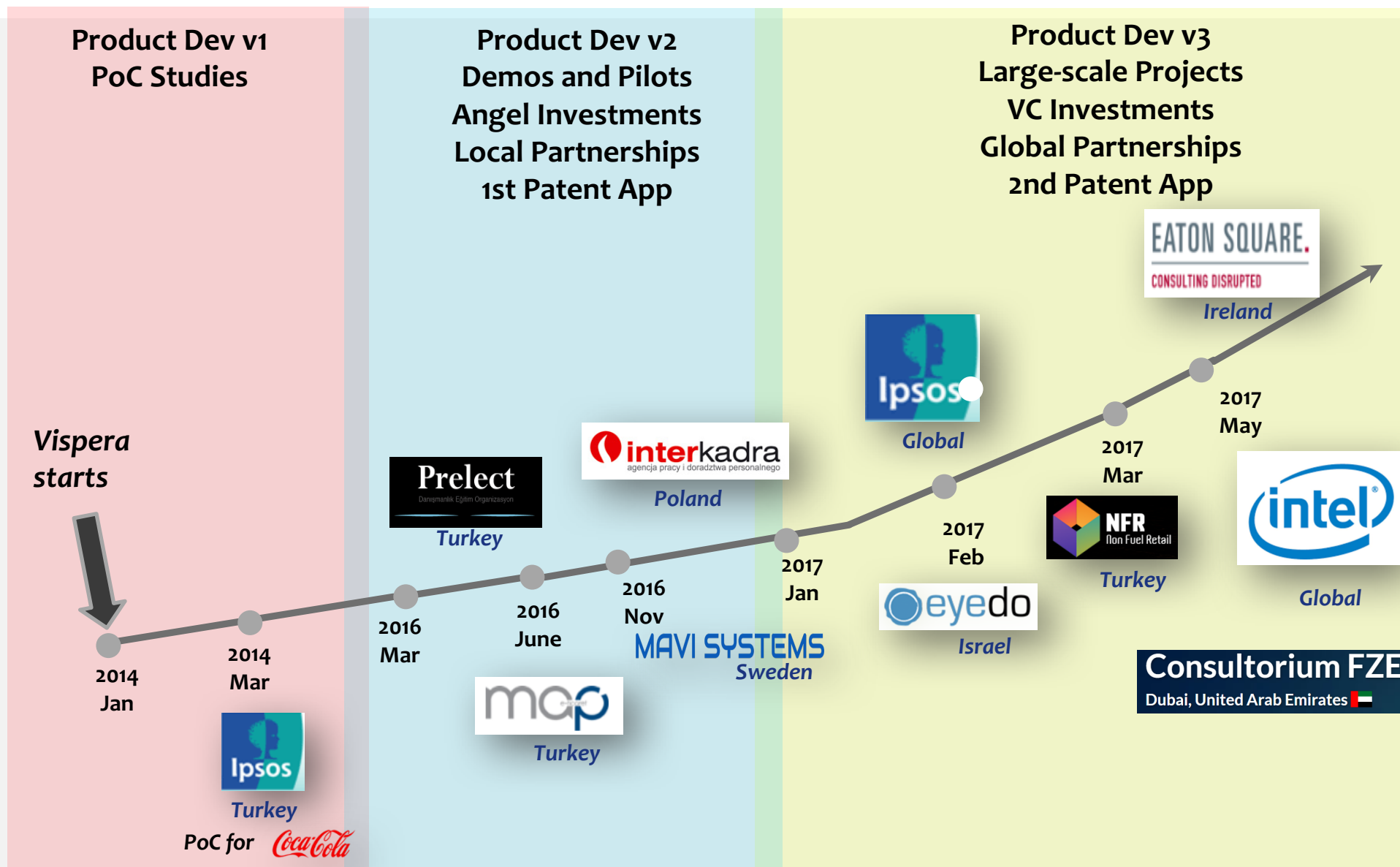


and continuing...



CUSTOMERS AND CHANNEL PARTNERS

Our Evolution



AWARDS



nielsen
innovate

**THE WINNER OF
THE PEPSICO INSIGHT
CHALLENGE**

2017

powered by NIELSEN



**SELECTED AS
ONE OF THE TOP
100 TURKISH STARTUPS**

IN 2015

**TOP 15
TURKISH STARTUPS
IN 2016**



**WINNER OF THE
I-COM GLOBAL
DATA STARTUP CHALLENGE**

2017



**VISPERA Received a Seal of
Excellence from the European
Union**



BEST PAPER Award Finalist

**VISPERA Selected to
TIM-TEB Grow Up
Program**

Customers and Early Adopters



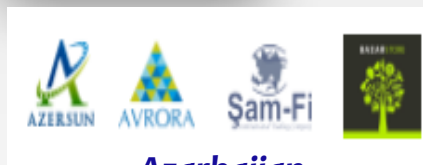
FMCG Companies / Distributors



- Pilot with Coca Cola Turkey (via Ipsos)
- Coca Cola-Mauritus
- Coca Cola Poland
- Coca Cola Iraq



Ireland



Azerbaijan

Retailers



North Cyprus



PIPELINE



U.S.A.

Pakistan
Mexico
Jordan
Turkic
countries



Israel

NORDSTROM

U.S.A.



Israel



U.S.A.



Dubai



Israel



Italy



Dubai



Israel



Germany

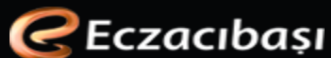
Düzey



Phillippines



Australia



Israel



MARKET SIZE

TOTAL ADDRESSABLE MARKET



Estimated Turkish
market
for Vispera products:
\$ 299
million /year

Estimated World market
for Vispera products:
\$ 27.5
billion /year

GO TO MARKET STRATEGY



FMCG Companies

- Direct sales
- Sales Partners / Distributors
- Partner with crowdsourcing / merchandising companies
- Partner with Market Research Companies like Nielsen / Ipsos

Retailers

- Direct sales
- Sales Partners / Distributors
- Strategic technology partners (Intel)



REVENUE MODEL

REVENUE MODEL



SAAS REVENUE MODEL

Per-Image / Per-store service fee – including standard KPIs

On-boarding fee – corresponding to the costs associated with the preparation phase of each new project

Support fee – for eventual SKU updates during the project

Mobile application licence fee – per device

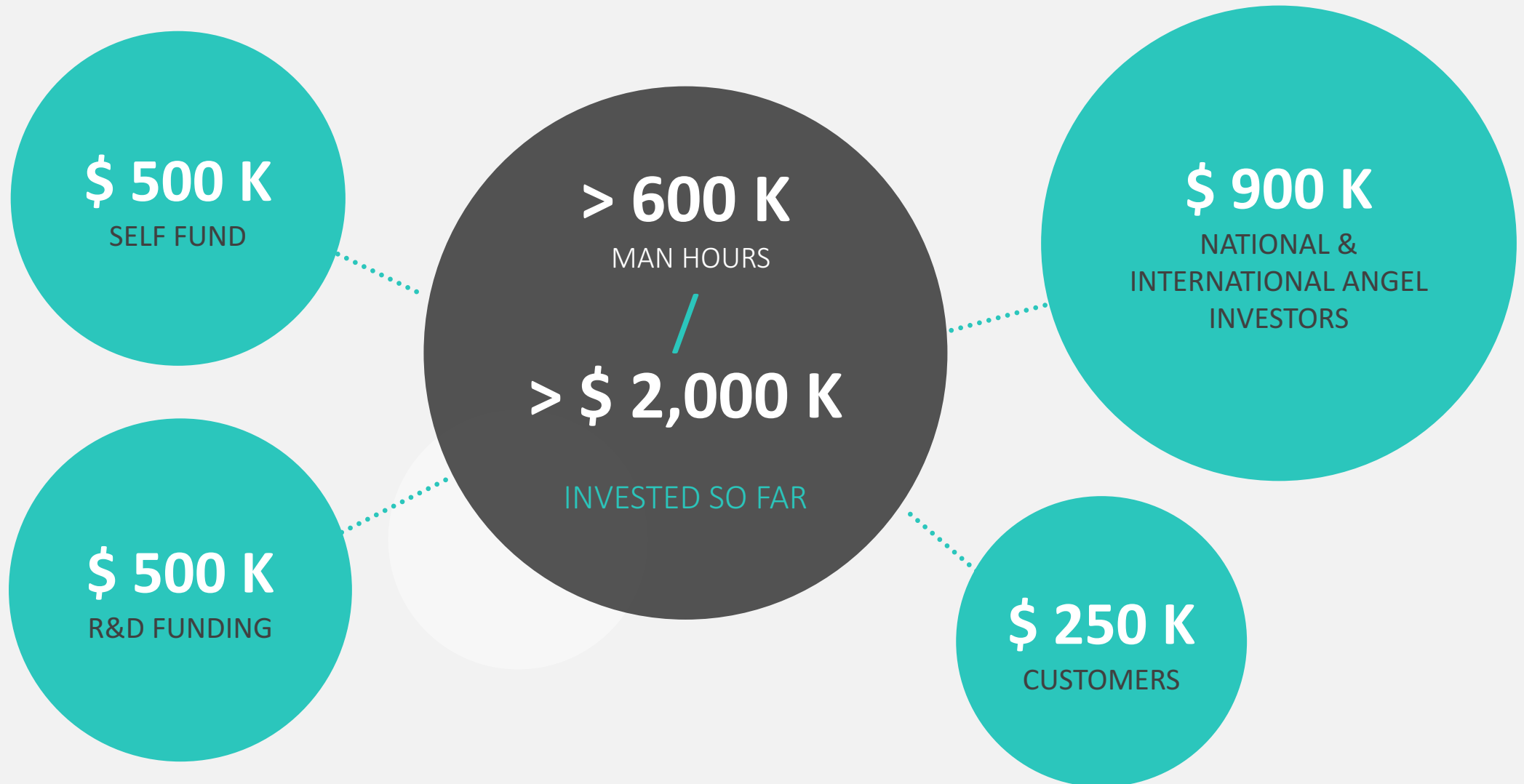
Dashboard subscription fee – per user

ON PREMISE SOLUTION REVENUE MODEL

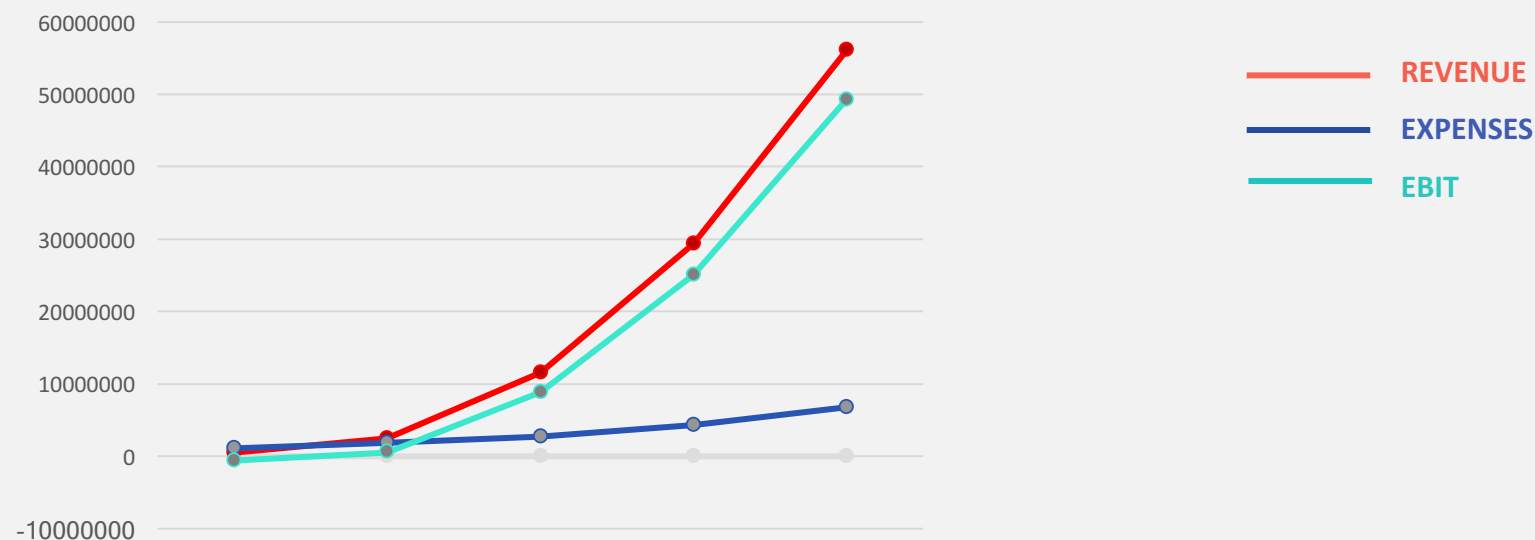


FINANCIALS

INVESTMENT



FINANCIAL PROJECTIONS



| YEAR | 2017 | 2018 | 2019 | 2020 | 2021 |
|----------|----------------|----------------|-----------------|-----------------|-----------------|
| REVENUE | \$517,552.97 | \$2,436,000.00 | \$11,565,000.00 | \$29,375,000.00 | \$56,090,000.00 |
| EXPENSES | \$1,098,313.88 | \$1,863,690.94 | \$2,717,671.25 | \$4,289,958.89 | \$6,782,296.23 |
| EBIT | \$(580,760.91) | \$572,309.06 | \$8,847,328.75 | \$25,085,041.11 | \$49,307,703.77 |

Does not include other verticals like pharmaceutical industry, warehouse monitoring

0.2%
MARKET
SHARE

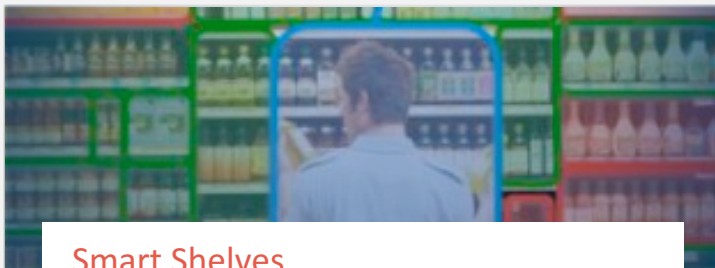
VISPERA VISION: THE NEW RETAIL



Activities / Trajectories Dwellings



Cashier Information

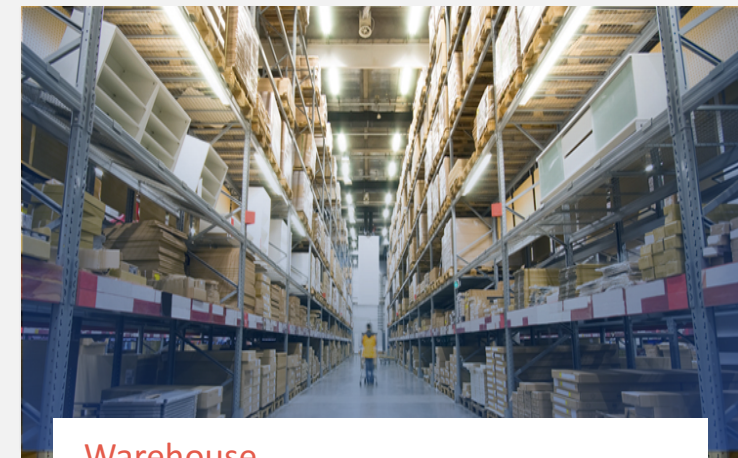


Smart Shelves

IOT Platform for Retail



Dashboard Analytics for Marketing KPIs

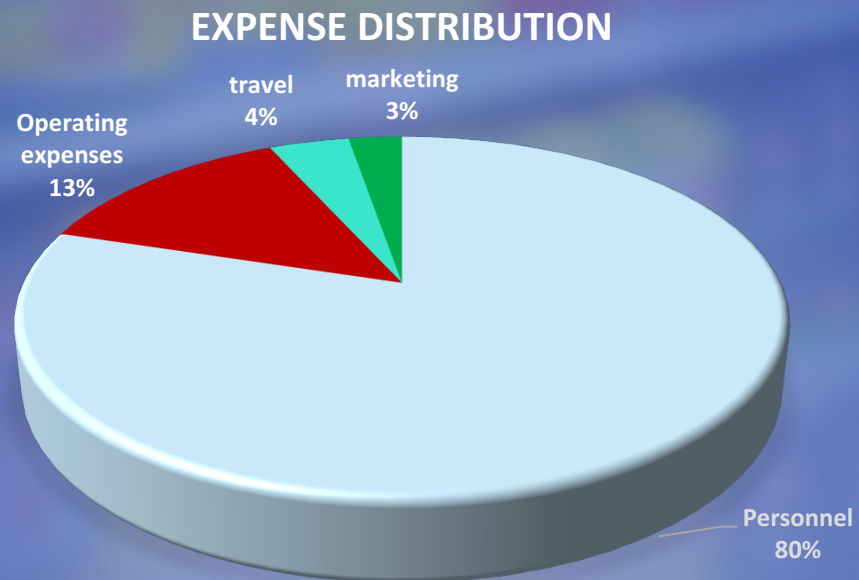


Warehouse

INVESTMENT NEED



1 million USD = expenses for 1 year



EXIT STRATEGY



1. SAP
2. GOOGLE
3. INTEL
4. ORACLE
5. IPSOS
6. NIELSEN
7. LOGO
8. IPO

SUMMARY



- Proven entrepreneur and a great team
- Novel solution in a very big market
- Few competitors, low market penetration
- Traction with major international brands
- Strong national / international partnerships
- Further prospects in other verticals and IOT services



A Vision for The New Retail

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