Increase Your Business with Arecont Vision Megapixel IP Technology

Customer Webinar

17 October 2012

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megapixel technology...
beyond imagination

Arecont Vision

Agenda

• Company Update	Scott Schafer [Executive Vice President]
• Marketing Insights	Marc Ladin [Chief Marketing Officer]
• Product Updates	Brad Donaldson [Product Manager]
• Success Story	Ethan Maxon [Regional Director]
• Tech Tips & Tricks	Ted Brahms [Director of Field Applications]
• Report on Quality	Darrel Tisdale [Director of Quality]
• Close & Q&A	

Arecont Vision Update

Scott Schafer
Executive Vice President

September 2012 Results

- September 2012 was a record sales month for any September in Arecont Vision History!
- 3Q12 was a record sales quarter!
- Key Initiatives for 4Q12
  - Key New Product Releases
  - Execute Special Product Programs
  - Increased Advertising and Promotion Activity
  - Company Expansion Internationally

Key Additions in 3Q12

- Arecont Vision Sales and Marketing Leaders
  - Marc Ladin, Chief Marketing Officer (CMO)
  - Kurt Takahashi, Director, Strategic Systems Integrators Plus*
  - Erin Glackin, Director, Sales Operations and Customer Service
  - Kalman Zhang, Director, China

- Arecont Vision Sales and Support People
  - Evan Boyd, ISM, EMEA
  - Joel Murawski, RSM, South Central USA
  - Harry Ervin, Region Field Applications Engineer, Eastern USA
  - Tony Piyapoj Phakdeesuparithi, RSM, South East Asia
  - Leo Lin, RSM, South China
  - Cathy Li Yuen Wah, RSM, Hong Kong
  - Paul Tao Huang , RSM China
  - Linda Wenjing Qiu, Inside Sales Coordinator, China
  - Jerry He, China Tech Support
  - Tommy Wu, APAC Inside Sales

Now Shipping!

- **MegaDome® 2**
  - **All-in-one Design**
    - 1.3MP, 1080p, 3MP & 5MP Resolutions
    - Integrated 3-9mm or 3.6-9mm Remote Focus, Remote Zoom, Auto-iris Lens
    - Day/Night, IR and Audio Options
    - Adjustable 3-axis Gimbal
    - IP66 & IK10 Vandal Resistant Dome
  - **Total PoE Solution**
    - PoE 802.3 af class 3 to Support Camera, Heater & IR LED ring
  - **Casino Mode, Binned Mode, Privacy Masking**
  - **PSIA & ONVIF Compliant**

MegaDome® 2

e.g. 1080p MD2 Models
AV2255AM : Base
AV2255AM-H : w/Heater
AV2255AM-A : w/Audio
AV2255AMIR : IR LED

Now Shipping!

- **Compact WDR**
  - **Dynamic Range up to 100 dB**
  - **1080p & 3MP Resolutions**
    - AV2116DNv1
    - AV3116DNv1
  - **Color & Day/Night Models**
  - **Fastest Frame Rates**
    - 21 fps @ 3MP
    - 32 fps @ 1080p
  - **Casino Mode, Binned Mode, Privacy Masking**
  - **PSIA & ONVIF Compliant**

Compact WDR

Customer Satisfaction Measurement

- Arecont Vision wants to get feedback on our performance and opportunities for improvement.
- Our first Customer Satisfaction Survey started in August.
- If you are contacted, please take a few minutes to respond. We appreciate your feedback.

Customer Satisfaction Survey

- Do you feel Arecont Vision is a valued partner to your business?
  - 86%- Yes

- **What is your overall satisfaction with Arecont Vision?**
  - Rating Average: 4 on a 5 point scale

Customer Survey Next Steps

We are taking the following actions based on the results from the survey:

- Increase communication and promotion of the RMA process and improvements.
- Increase awareness of the Advance Replacement Program through the Tech Support Team, the Web, online hold messaging and through inside sales.

We will be sending out the same survey to a new group of customers each month.

Progress

While it takes time to make infrastructure changes that make a real difference, we are making very good progress.

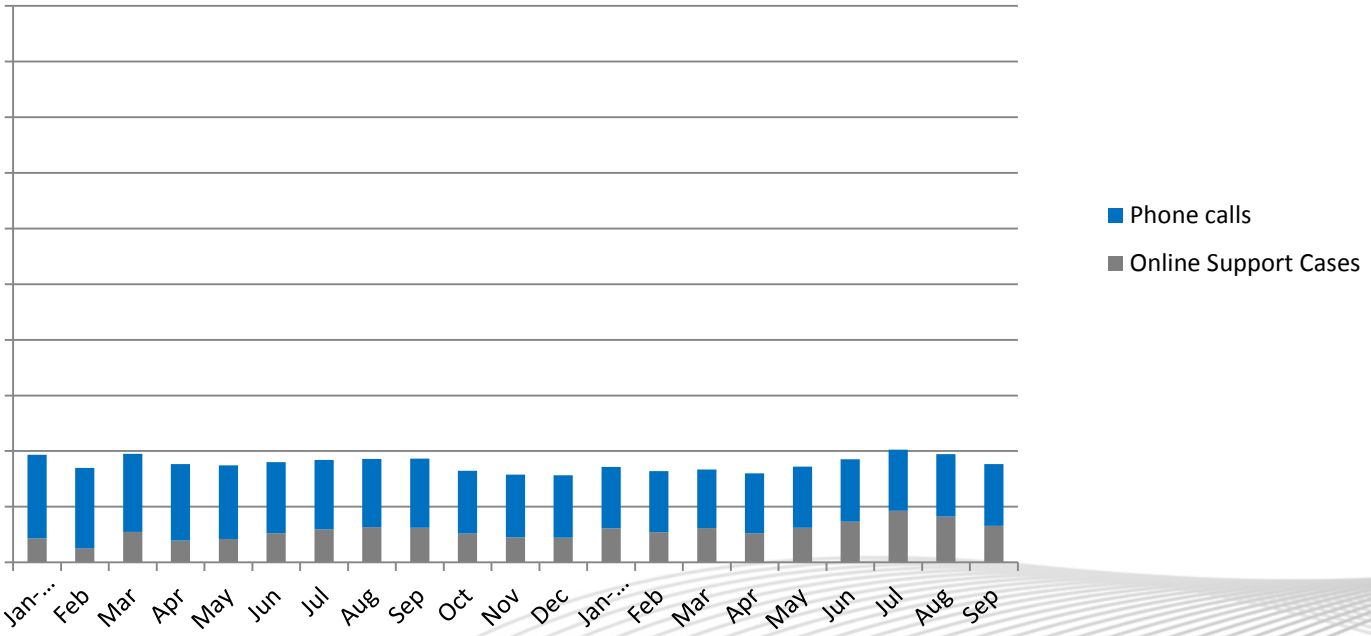
- Quality processes (metrics will follow)
- Technical Support people and processes
- Warranty process
- RMA process
- Inside Sales Support people and processes

Customer Service Improvement

- New Release Process: FCA →GCA. More thorough QC testing prior to release, including feedback from Partners and Customers
- Customer Service is improving with new people.
- Field Engineering Support improving with more bandwidth and capability.
- On-Line On-Demand Technical Training is launched.
- Technical Support personnel and metrics are much improved.
- Telephone, JIRA system programs and processes are improved.
- Technical Support/ Customer Service weekly meetings
- RMA Process is much improved.

…..but we are not done yet!

Technical Support Cases



RMA Process

Situation

- **The RMA Process is rated as one of the key areas for improvement by our customers, our sales representatives, our field and inside sales people, our technical support team and our management team.**

- **We have made significant incremental process improvements to our processes and procedures with very good responses from our customers.**
  - **RMA Process changes and improvements in Technical Support, Receiving and Operations, Finance/Accounting and Shipping.**
  - **Customers may request an Advance RMA**

- **There is more we can do to improve the process for our customers.**
  - **Reduce complexity**
  - **Reduce cycle time**
  - **Consistent expectations and results**

- **There is more we can do to provide a better, consistent economic package for our customers.**

RMA Program 3.0

In-Warranty ADVANCE RMA

- **Follow Advance Replacement Procedures**
- **For replacements where the failed unit is returned, the cost to the customer is zero. For replacements not returned within 30 days of the RMA request, customer is charged 40% off product's MSRP. The charges will be made against credit card number or PO number, if the customer has an account in good standing with Arecont Vision.**
- **RMA for product within 90 days of installation receive a new product replacement. For products installed longer than 90 days, the replacement cameras are reconditioned or new.**
- **The warranty of the replaced cameras is for the remaining warranty of the original camera. For example, if the RMA occurs 1 year after installation and the original camera warranty was 3 years, the RMA replacement still carries the remaining warranty of two more years.**
- **The customer may pay for overnight freight if desired. Otherwise, shipments will be standard UPS ground.**

RMA Program 3.0

<u>Out-of-Warranty ADVANCE RMA</u> (products less than 2 years out of warranty period)

- **Follow Advance Replacement Procedures**
- **The following are the charges for repairing out of warranty cameras by product class:**
  - **$175 MegaVideo Compact Repair (i.e. AVxx1x), MegaVideo Mini Repair (i.e. AVxx1x)**
  - **$225 MegaView Repair (i.e. AVxx2x)**
  - **$275 MegaDome Repair (i.e. AVx5xDN), D4 Series Repair (i.e. D4xAVxxxx)**
  - **$400 SurroundVideo Repair (i.e. AVx18x, AVx36x)**

- **For replacements where failed unit is returned, there will be no additional cost above the repair fees to the customer, unless the camera is damaged beyond repair. For replacements not returned within 30 days, customer is charged 40% off product's MSRP. Charges made against credit card number or PO number.**

- **The customer may pay for overnight freight if desired. Otherwise, shipments will be standard UPS ground.**

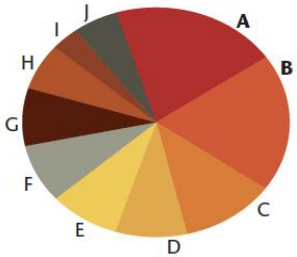
RMA Program 3.0

<u>Benefits</u>

- Customers get what they want – a replacement camera sent out quickly. This should allow for a 3-day turn around plus 3 day shipping, 6 days total.
- Only customers that want their original camera repaired will be outside of this timeline
- There is no longer any Diagnostic fee.
- We don’t wait for payment, which is a major delay in the current process.
- Clearly set expectations and provide a streamlined camera replacement process

Growing Revenues

If you had to identify one type of technology to generate more nonrecurring revenues, what would it be?



Key trends: Megapixel IP video exploded by 7.8% to overtake the top position. General video surveillance/CCTV slipped 5.8 percentage points. Mass notification picked up 1.2 points. Among the "other" responses were standalone keyless devices and "analytics that work."

A. Megapixel IP video	19.7%
B. General video surveillance/CCTV	17.3%
C. Standard IP video surveillance	11.6%
D. Wireless networks (includes mesh)	9.8%
E. General access control	9.2%
F. Mass notification	8.7%
G. Fire alarm systems	7.5%
H. Upgrading communications/ signal transmission	6.9%
I. Intrusion alarm systems	2.9%
J. Other (please specify)	6.4%

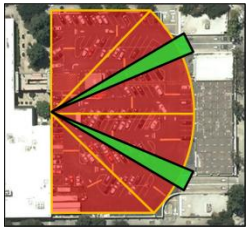
SECURITY SALES & INTEGRATION

Security Sales and Integration Magazine
August 2012, Page 55

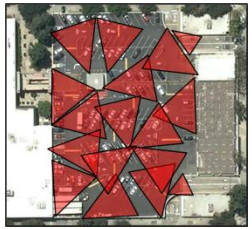
Provide the Best

Superior Image | Managed Bandwidth | Best ROI

H.264 is the Game Changer



3 vs. 17



Customers ask: “Why haven’t you shown me this before?”

- Fastest Frame Rates
- Smallest File Sizes

- More detail with fewer cameras.
- Real Savings:
  - Installation
  - Management

Marketing Insights

Marc Ladin
Chief Marketing Officer

Leading the Way in Megapixel Video

Marc Ladin

Chief Marketing Officer

818.937.0700 l mladin@arecontvision.com

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Arecont Vision

Company Profile

Arecont Vision protects your most valuable assets by providing the most efficient, highest resolution Multi-Megapixel IP Cameras for the Surveillance Industry.

Multi-Megapixel Imaging

The World's Most Valuable Brands Trust Arecont Vision

Large Enterprise

Google
NBC UNIVERSAL
facebook
amazon.com
Microsoft

Healthcare

UCLA Health System
Virtua
Great Ormond Street Hospital Charity
Temple University Health System
PENN Medicine
UC San Diego Medical Center
ROCHESTER GENERAL HOSPITAL
LOMA LINDA UNIVERSITY MEDICAL CENTER

Education

UCLA
THE UNIVERSITY OF RHODE ISLAND
GEORGE MASON UNIVERSITY

Manufacturing

QUALCOMM
MERCK Be well
MATTEL
gsk GlaxoSmithKline
JOHN DEERE
CATERPILLAR

Banks

citibank Deutschland
ICBC (Asia) 工銀亞洲
BBVA Banco Provincial
ABSA
ibq
STATE STREET.
البنك التجاري الأردني Jordan Commercial Bank

Retail

LOUIS VUITTON
HERSHEY'S
MUJI 無印良品
Walmart Save money. Live better.
Microsoft Store
YVES ROCHER FRANCE
WHOLE FOODS MARKET
ROLEX
Salvatore Ferragamo
GUCCI
T-Mobile
benetton
REGAL CINEMAS
IKEA
LA FITNESS
NIKE
21 CLUB
cricket wireless

Gaming

wynn
HAMBURG CASINO AT THE FAIRMONT HOTEL
Hard Rock CAFE
Chumash Casino RESORT
RESORT & CASINO PECHANGA
THE VENETIAN LAS VEGAS

Municipalities

New York City
Bay Area Air Quality Management District
Shanghai CHINA
ROC
EXPO 2010 SHANGHAI CHINA
Bettendorf
Sydney 2017

Petrol/C-Store

Shell
ادنوك ADNOC
MURPHY OIL CORPORATION
ساتورب satorp
ADVENTURE'S FIRST STOP MAVERIK
FLYING J
FRONTIER OIL CORPORATION
TOTAL

Gov't/DoD

Logistics

FedEx Express
TNT
Kroger
KUEHNE+NAGEL
CATHAY PACIFIC CARGO
ups
BURBERRY
DHL
UNITED STATES POSTAL SERVICE

Ports

Brisbane Airport Queensland Australia
LONG BEACH AIRPORT
HAIFA PORT
TAIPEI 臺北
JOHN WAYNE AIRPORT ORANGE COUNTY

Hotels

Hilton HOTELS & RESORTS
Holiday Inn
Le Mauricia HOTEL · MAURITIUS
Sheraton Phoenix Airport HOTEL TEMPE
InterContinental HOTELS & RESORTS
Kowloon Shangri-La HONG KONG
Sainte Anne RESORT & SPA · SEYCHELLES

Auto Sales

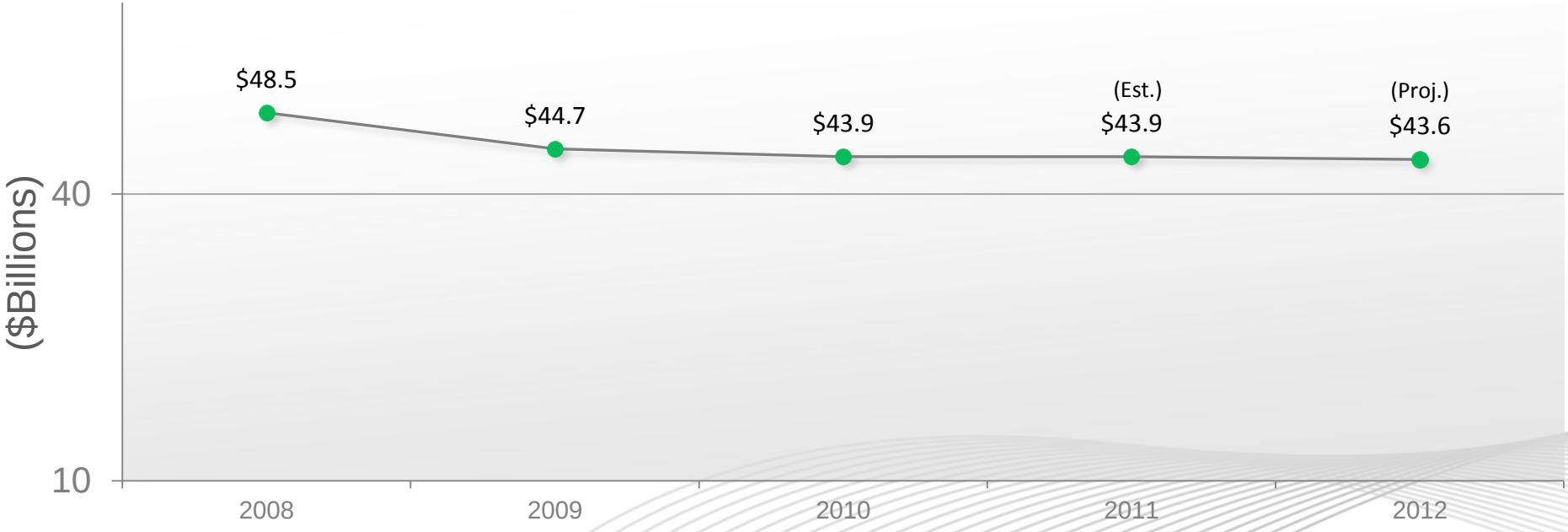
Mercedes-Benz
INFINITI.
PORSCHE
BMW
Barloworld Automotive
AL NABOODA AUTOMOBILES
KEYES

Large Venue

U.S. Cellular Field
the nec birmingham
GALLAGHER SERVICE
ExpoCentre Sharjah
新世紀廣場 Grand Century Place
YMCA OF THE NORTH SHORE
BAYLOR STADIUM
ATM

SDM 2012 Industry Forecast

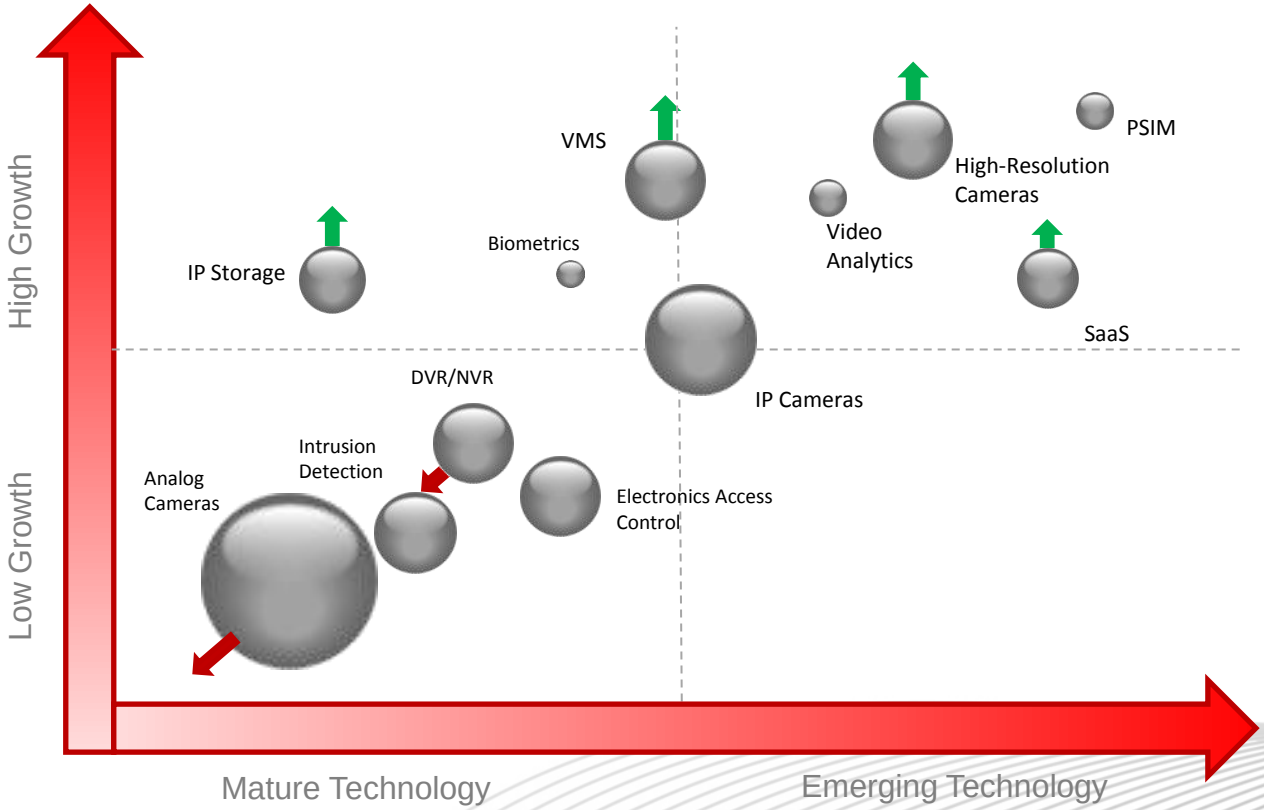
Flat Growth



megapixel technology...
beyond imagination

Arecont Vision

Trends in Physical Security



megapixel technology...
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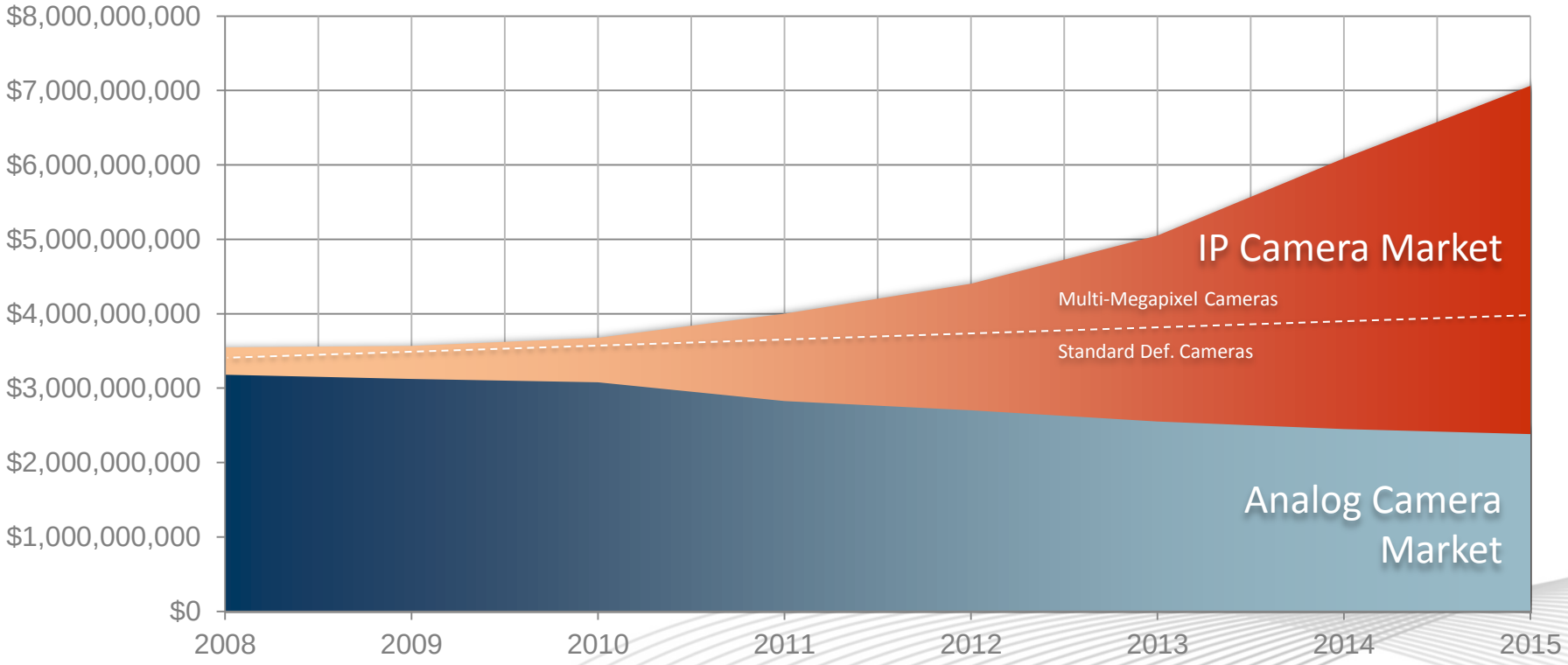
**Based on Frost & Sullivan Physical Security Trend Dynamics 2011*

Arecont Vision

Move to Multi-Megapixel is Accelerating



Manufacturer Value (Arecont Vision Estimates 5.12)

Pixel per $ – The ROI of Megapixel

Class	Resolution	Pixels	AV Pix / $1
10MP	3648x2752	10,039,296	18,438
5MP	2592	5,038,848	10,179
3MP	2048x	[illegible]	7,149
HDTV 1080p	1920x	[illegible]	5,891
1.3MP	1280x1024	1,310,000	4,039
HDTV 720p	1280x720	921,600	2,836
VGA	640x480	307,200	1,536

12x

Improvement Over Analog

When it Comes to Megapixels, What Matters Most

PERFORMANCE

INNOVATION

ROI

QUALITY

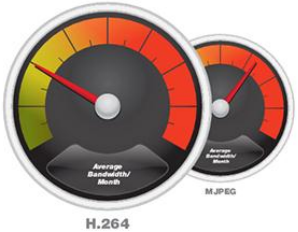
CUSTOMER SERVICE

Performance

20MP
DAY/NIGHT PANORAMIC

The First 20MP H.264 Day/Night
180 and 360 Degree Panoramic
Cameras on the Market

Highest Resolutions



Most Efficient Compression (H.264)

10x Average Bandwidth and Storage Reduction over MJPEG

180º and 360º Panoramic Imaging

Day/Night

Wide Dynamic Range

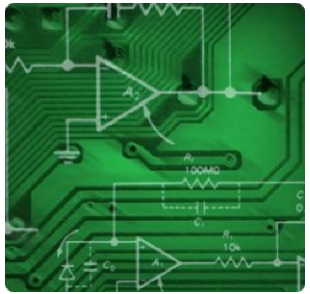
Casino Mode

And More…

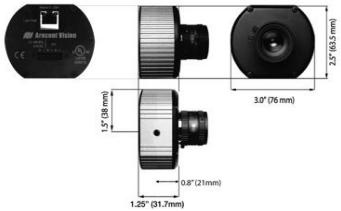
- Most Integrated
- Image Quality
- Color Accuracy
- Standards-based

(PSIA Compliance and ONVIF Compliance)

Innovation



Multi-Megapixel and Multi-Sensor H.264 Visionaries



Built by Arecont Vision from the Ground Up

First Multi-Megapixel Panoramic Camera

Broadest Multi-Megapixel Product Line

Global Leadership with Customers in 100 Countries

Easy Upgradability Protects Your Investment

Recognized Leader

PSA Security Network
Outstanding New Vendor Achievement Award – 2012

PSA Security Network
Star Vendor Achievement Award – 2012

CPSE Golden Cauldron Award - 2011

PSA Security Network
Premier Partner Status – 2012

Milestone Systems
Camera Partner of the Year – 2011

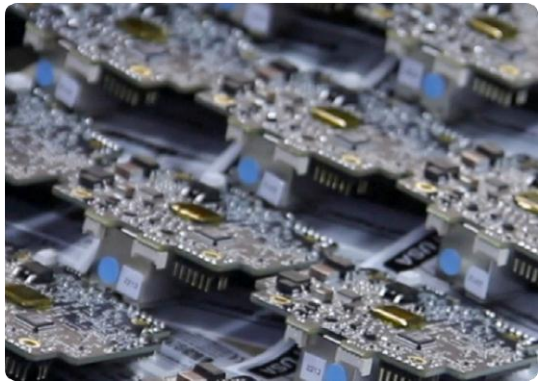
Quality

Best Practices

Advanced Manufacturing and Quality Control Processes

- Globally Redundant Supply Chain
- Agile Hardware and Software Design Principles
- 3 Separate and Redundant QC Checkpoints
- Industry's Most Responsive Support and RMA Processes

Solid-State Technology



Made in USA

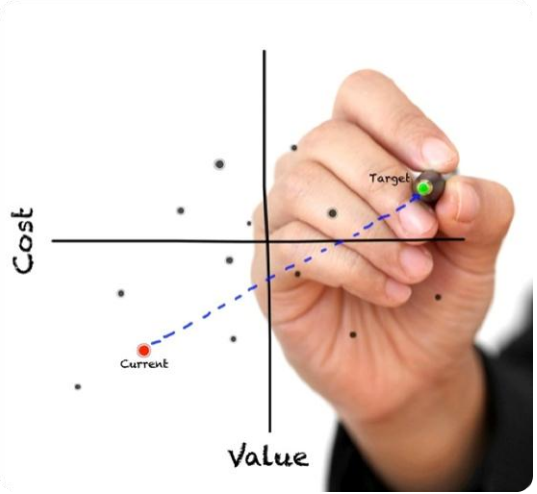
ROI

Lowest Cost/ Pixel per Dollar (Pp$)

Pixels	AV Pix / $1
307,200	1,536
921,600	2,836
1,310,000	4,039
2,073,000	5,891
3,145,728	7,149
5,038,848	10,179
10,039,296	18,438

Camera Reduction

Lower TCO



Customer Service

At Arecont Vision, customer service is an essential component of our business. We stand behind our products and work hard to provide information and support when and where you need it.

Pre-Sales Support

Post-Sales Service

Global Support Resources

The Past, Present and Future of Multi-Megapixel Innovation

2004
- G1: 1.3-3MP

2005
- 1st DayNight DualSensor

2006
- G1: 5MP
- G1: JPEG 8MP: 180°/360°

2007
- G2: 1.3-5MP DualSensor

2008
- G3: H.264 1.3-5MP DualSensor
- G2: H.264 8MP: 180°/360°

2009
- G1: 1.3-5MP

2010
- G3: DN IP66 VR 8MP: 180°/360°
- 1080p 10MP
- G4: JPEG 1.3-5MP, H.264 1.3, 1080p
- G1: 1.3MP, 1080p

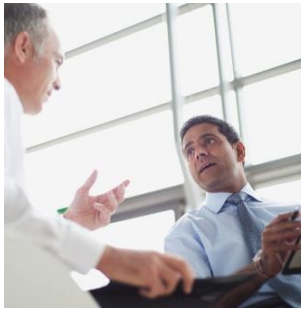
2011
- G1: 3-5MP
- G3: DN 20MP 180°/360°
- D4F, D4S 1.3-5MP
- D4SO 1.3-5MP
- G2: Total PoE
- G3: Color, 8MP & 20MP
- G4: H.264 1.3-10MP

2012
- G4: DN 12MP WDR, IP66 VR, 180°
- G2: 10MP, 1.3-5MP, RF, RZ, IR, Audio & ONVIF
- G5: 1.3-10MP, H.264, IPv6, HTTPS, WDR 2-3MP, ONVIF
- G2: WDR 2-3MP, ONVIF
- G1: 1.3-5MP, H.264, IPv6, HTTPS
- WDR 2-3MP ONVIF

2013
- HTTPS, IPv6
- 40MP, 180°/360°, ONVIF
- G2: RF, RZ, WDR
- G2: SD Card, HTTPS, IPv6
- G5: 3MP WDR Dual Sensor, 5MP Dual Sensor, HTTPS, IPv6
- G3: RF,RZ, HTTPS, IPv6
- G4: IP66, VR, 12MP, 360°, ONVIF

It’s Easy to Work with Us

Comprehensive Partner Program to Address Your Unique Needs



Distributor Success Program

Channel Partner
Certification Program

Technology Partner Program

A&E Partner Program

Reseller Partner Program

Customers Realize Value Everyday with Arecont Vision Solutions

"Installation of Arecont Vision cameras at the Monroe Police Department has given the officers peace of mind. The high quality video enables us to analyze and verify any suspicious activity as well as support improved situational awareness."

— Detective Jim Frankild

Monroe, New York Police Department

"We have installed almost every variety of megapixel camera made by Arecont Vision, from the 1.3 megapixel MegaDome® to the 8 megapixel 360-degree SurroundVideo® panoramic camera. We now have better forensic capabilities and more flexibility in the recovery of data."

— James L. McCarthy Jr., Director of Physical Security,

George Mason University

"We had perfect vision of live events, but also perfect vision post-occurrence so that we could go back and track anything and any view that may have happened in the park, wherever the cameras are covering. It gave us a path of retribution and recovery should assets go missing"

— Sharon Kingman

Director of Information Technologies,

World Equestrian Games

"The addition of Arecont Vision's megapixel camera solutions allowed us to get better picture quality from cameras that cost less than competing VGA cameras. It has great picture quality, works easily and is reliable."

— Brad Balonick

Information Technology Systems Coordinator at

Lake Forest High School

"The megapixel video system has really come into its own in other aspects outside of the basic security requirement that we had. We've noticed that by having the cameras in strategic locations we can really control the amount of incidents or alleged incidents that take place at the dealership"

— Peter Wilson, Owner, ***Orlando Infinti***

The Arecont Vision Advantage

Arecont Vision protects your most valuable assets by providing the most efficient, highest resolution Multi-Megapixel IP Cameras for the Surveillance Industry.

Performance

Innovation

Quality

ROI

Customer Service

Thank you!

Q4 2012 Promotions

- **Offer details:**
  - Buy a WDR MegaVideo Compact 3MP camera at the WDR MegaVideo Compact 2MP price.
  - Buy any 5MP camera at the 3MP price! MegaVideo Compact, MegaDome, MegaDome 2, MegaView and D4S/D4F/D4SO.
  - Buy a MegaVideo Compact 10MP camera at the 3MP price!

Product Updates

Brad Donaldson
Product Manager

Wide Dynamic Range

What is Wide Dynamic Range?

Wide dynamic range (WDR) is a feature that combines two images at different shutter speeds in such a way as to capture the details of the scene in both the bright and the dark areas simultaneously.

Non-WDR Image

WDR Image

Wide Dynamic Range

Example Use Cases

- Applications with windows where the field of view captures both indoor and outdoor activities.
  - Retail
  - Banking
- Areas that have both bright and dark areas simultaneously.
  - Airports
  - Schools / Campuses
  - Prisons
  - Parking Garages

Wide Dynamic Range

MegaVideo® Compact WDR
H.264 IP Megapixel Camera
Available Now

The Arecont Vision MegaVideo® Compact WDR is designed for high contrast surveillance applications that require high resolution, low bandwidth images at an affordable price point.

- Available in 1080p and 3MP Resolution
- Industry's fastest frame rates
- True wide dynamic range of up to 100dB at full resolution
- ONVIF and PSIA conformant for maximum interoperability
- No resolution loss in WDR mode
- NEW installer friendly web interface
- Small form factor
- Designed to be backward compatible with non-WDR Compact Series

Wide Dynamic Range

MegaDome®2 WDR
H.264 IP Megapixel Camera
Coming Soon

- Remote focus / zoom
- All-in-one, total PoE solution
- P-Iris technology

MegaBall™ WDR
H.264 IP Megapixel Camera
Coming Soon

- Modern, installer friendly design
- All-in-one, PoE solution

Wide Dynamic Range

12MP WDR PanoDynamic™

180° Panoramic SurroundVideo®

H.264 IP camera

Coming in 2013

- Compact Design
  - Same housing as MegaDome!
- Vandal and weather resistant dome
- PoE or external power options
- Binned mode for improved low light performance
- 2 axis gimbal (pan + tilt)
- PSIA and ONVIF conformant

World's 1st WDR Panoramic Camera

Wide Dynamic Range

Key Takeaway #1

1. One configuration

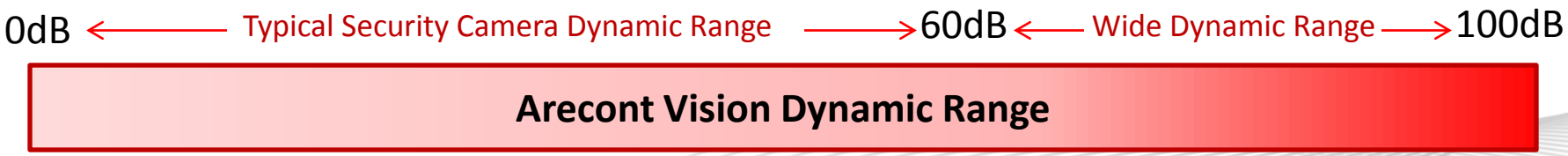
Arecont Vision WDR technology provides an optimized image automatically with no manual changes in settings.

Wide Dynamic Range

Key Takeaway #2

2. Not all WDR is True WDR.

- Arecont Vision WDR technology provides up to 100dB of wide dynamic range at full resolution.
- Beware of competitors that claim WDR but:
  - Resolution significantly drops in WDR mode or,
  - The camera is only “WDR Enhanced”, not true WDR of 100dB



Wide Dynamic Range

Key Takeaway #3

3. Complete WDR product line for any installation.

Sales Success Stories

Ethan Maxon
Regional Director — Southern Hemisphere

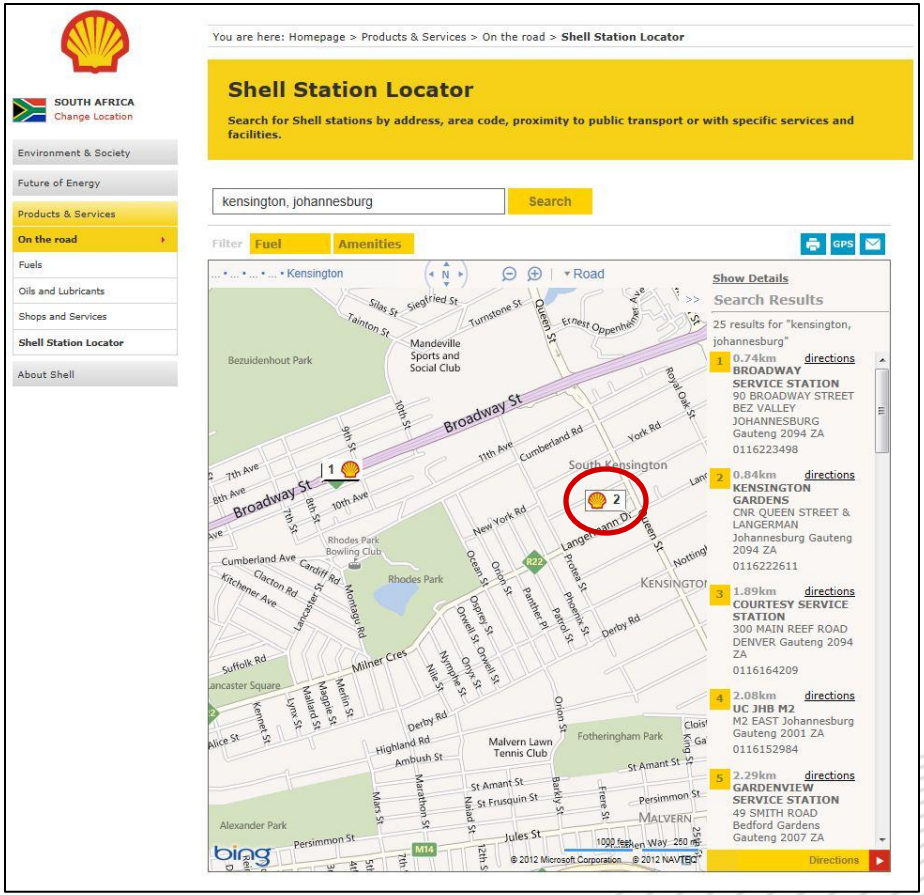
How I Shot the “Springbok”

Shell Kensington

SI – Enforce Electronics

What is a “Springbok”

Customer



Shell Station Kensington Gardens

Johannesburg

South Africa

Challenges

- Challenge #1 – efficient coverage of retail area capturing faces at the cash register, lessening shrinkage, and showing general view of retail aisles.
- Challenge #2 – having general view of “forecourt” area around gas dispenser islands and capturing license plates of cars.

Challenge #1 – Retail Area

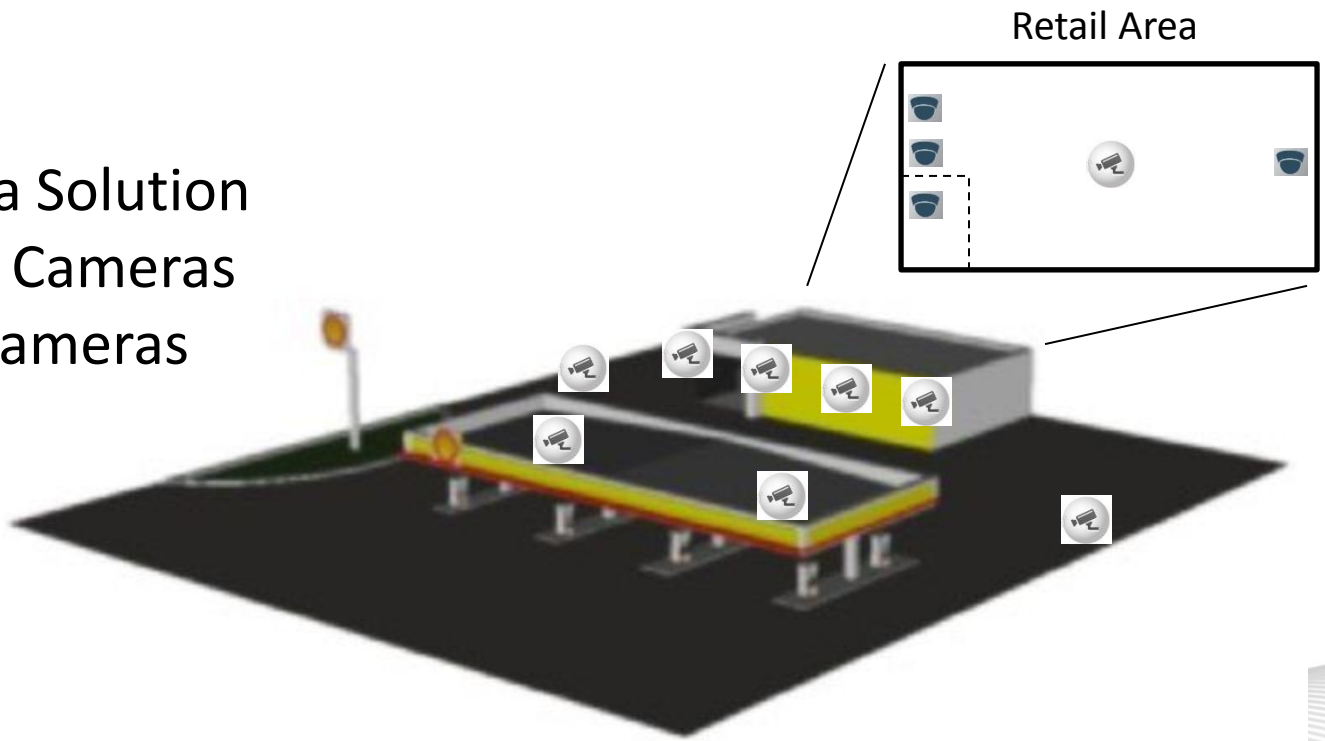
Arecont Vision

Challenge #2 - Forecourt

Proposed Solution – Analog

Analog Camera Solution

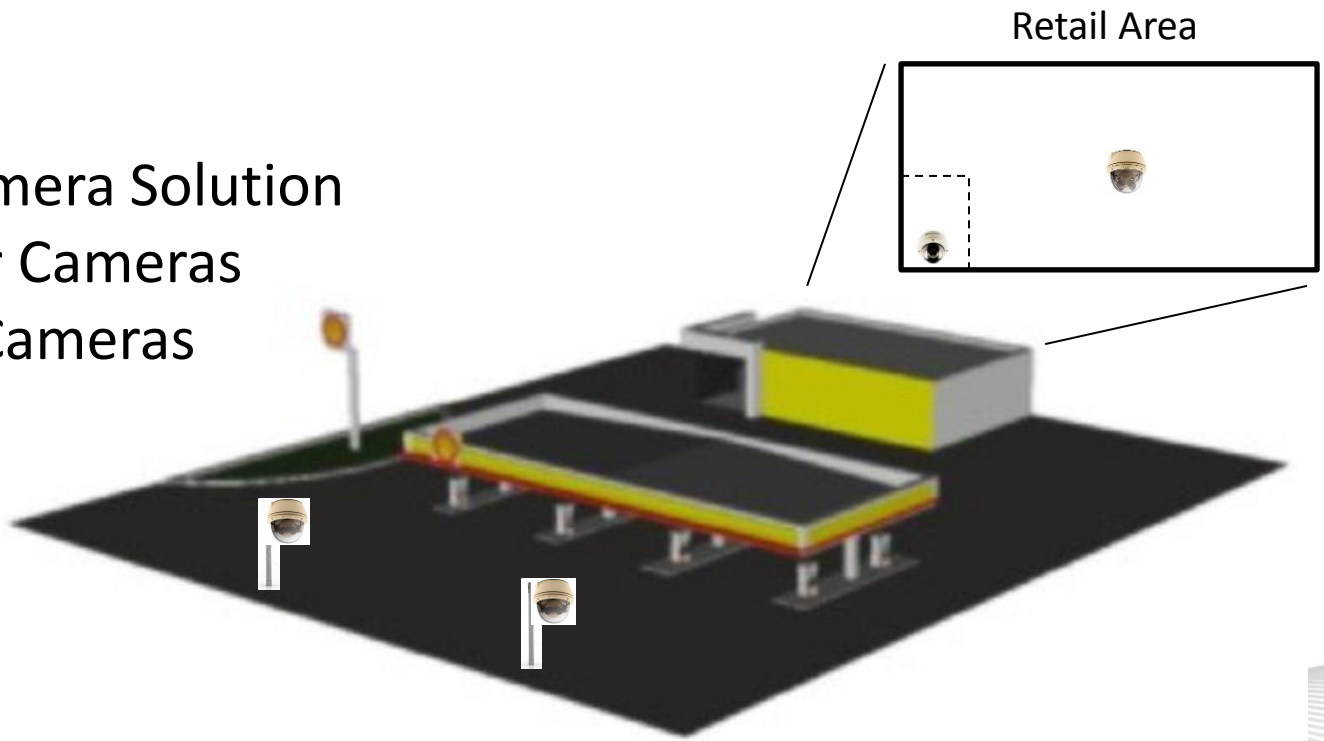
- 8x Outdoor Cameras
- 5x Indoor Cameras



Proposed Solution – Megapixel

Megapixel Camera Solution

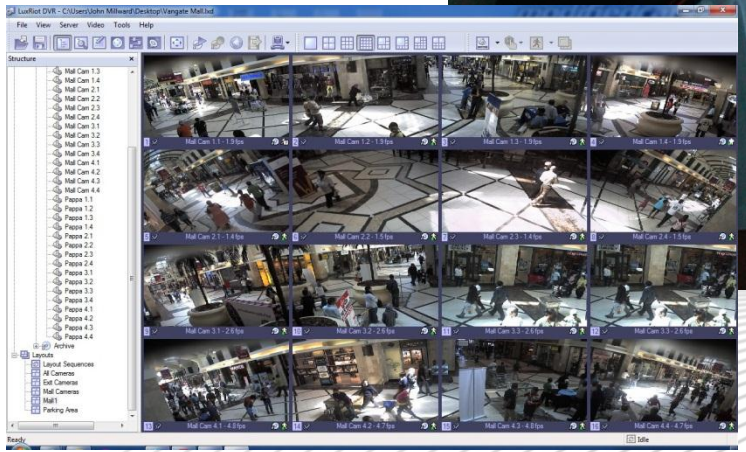
- 2x Outdoor Cameras
- 2x Indoor Cameras



Solution

Local SI's Combined Solution:

- Arecont Vision Megapixel Cameras
- Luxriot Video Management Software
- Miro Nanostation Wireless Equipment



Customer Benefits

- Reduced No. of Cameras
- Reduced Installation Cost
- Reduced Camera Licenses

AV8365DN

AV8185DN

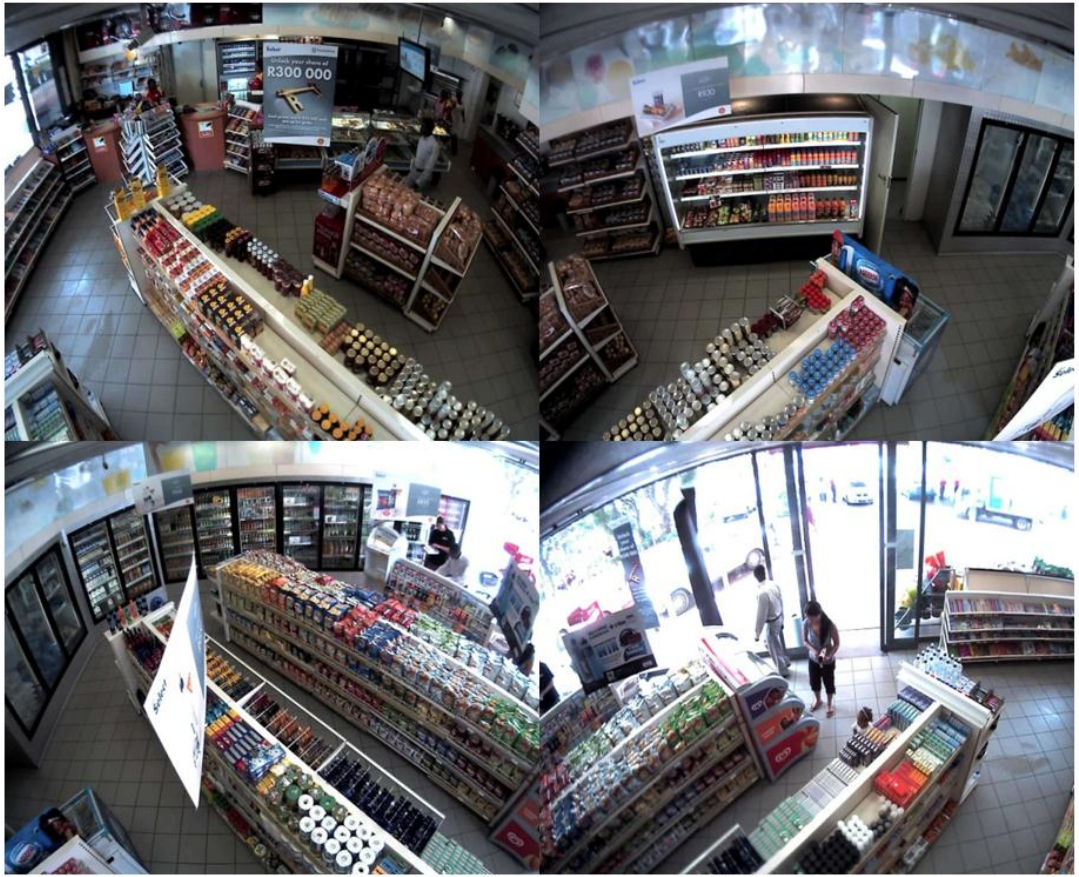
AV3155DN

Retail – Camera Positions

megapixel technology...
beyond imagination

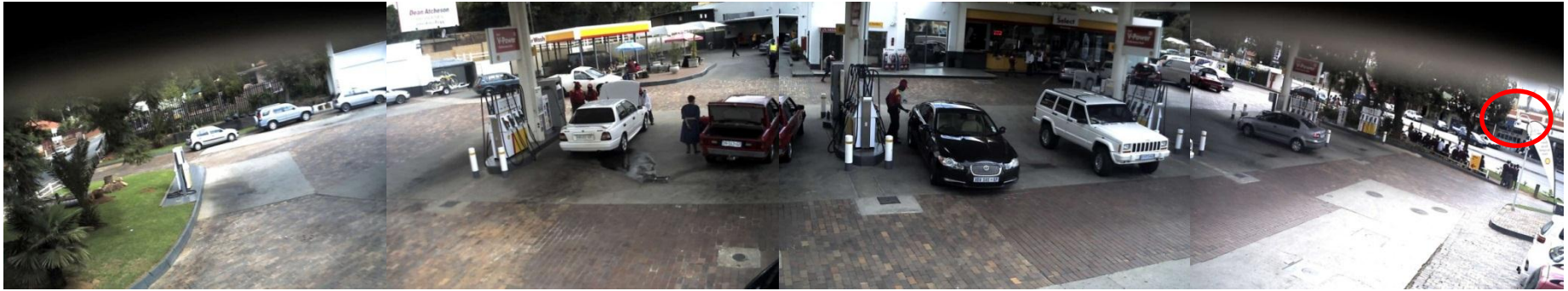
Arecont Vision

Challenge #1 – Cover Retail Area



Arecont Vision

Forecourt – Camera Positions



PHR401*GP

DNF042*GP

XBV 181 * GP

WKB158 GP

SFN 924 GP

Summary

- Customer had two main areas of his petrol station that needed coverage:
  - Retail Area – facial recognition at the register and general views of retail ailes
  - Forecourt Area – general views of the gas dispenser islands and LPR of automobiles

- Camera Reduction **AND** Increased Resolution
  - Camera Count – decreased from 13 analog cameras to 4 Megapixel cameras
  - Panoramic Views – situational view of gas station islands
  - License Plate Recognition (LPR) – cameras close enough to achieve LPR of parked cars
  - Facial Recognition – use of 3MP MegaDome to capture faces at register
  - Total Pixels – despite decrease of 9 cameras, we increased total pixels from 4M to 27M

- Reduction of Total System Cost
  - Fewer cameras & license fees – decreased from 13 to 4 total cameras
  - Decrease in installation, labor & cable – avoided digging concrete by using wireless

Tech Tips and Tricks

Ted Brahms
Director of Field Applications

Megapixel Imaging for Facial Recognition

Practical Applications and Considerations

What is Facial Recognition?

- There are two distinct types of video facial recognition
- An analytic function performed by software
- And human identification by a surveillance operator

Facial Identification by Software

- Biometric face identification is not used in most common surveillance systems
- Requires heavy CPU processing
- Has often experienced high rates of inaccuracy

Facial Identification by Software

- Needs specific resolution and fields of view
- Difficult to implement with live crowds
- Physical differences, facial hair, and clothing add complexity
- People frequently don’t look in the optimal direction

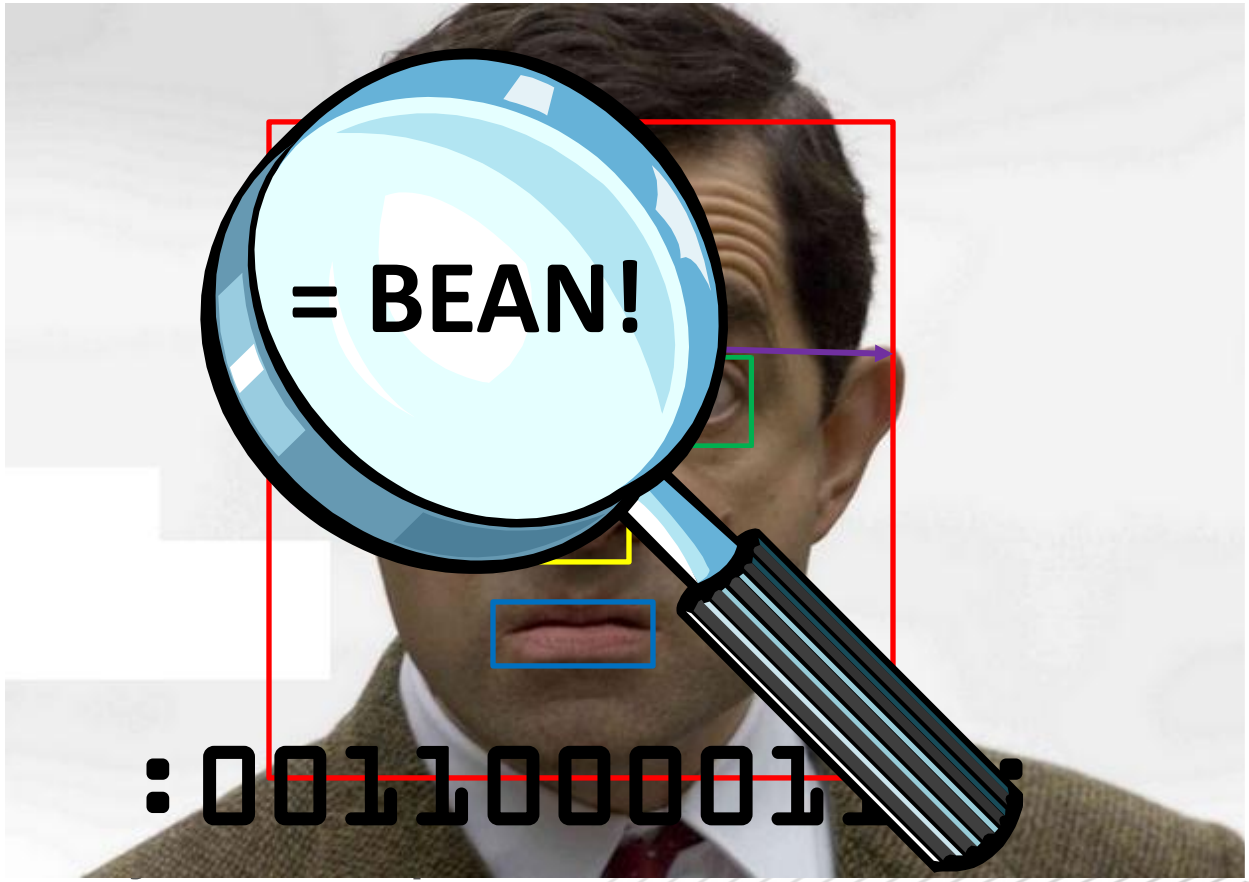
Facial Identification by Software

- Most applications of this type have been by large governmental agencies
- These are generally “Beta”” tests of the technology
- Faster, more accurate, more sophisticated algorithms are continually being developed

Will it Work with Megapixel?

- High resolution images see more face detail at greater distance
- Accuracy should increase with greater levels of image detail and as more sophisticated algorithms are developed
- Reality check - megapixel applications of this type are still in infancy

How it Works – High End Overview



Who Has this Technology?

A few software companies developing this type of technology,

- http://www.visionics.com Visionics
- http://www.wavestore.com Wavestore
- http://www.iridiantech.com Iridian Technologies
- http://www.nextgenid.com NextgenID, Inc.

Facial Recognition by Humans

- Common application for megapixel surveillance projects
- Level of detail subjective to who's looking
- Best results with resolutions higher than 60-100ppf / 195 -330 ppm

Facial Recognition by Humans

- Sometimes the project specifies a minimum resolution
- If not, make sure you clarify minimum level image clarity expected by the end user
- The end user could be disappointed if more clarity is expected than the system delivers

What Megapixel Can Deliver!

- 5 megapixel image from a

ers)

4 ppf

f a

Some Examples, Judge for Yourself

What I did

- The camera – AV5115DN (65210 firmware)
- The lens Tamron M118FM16
- How I did it,
  - Set up a field of view and measured at full resolution and took a picture
  - Then cropped the picture and moved the camera back until the same field of view was duplicated again and took another picture
  - Then repeated the same until I got to 60ppf/200ppm

Could you Identify Him?

- The subject, a framed poster
- Actual face size is exactly 1-foot high roughly life size
- So who is the guy in the poster?
  - Hint #1, How I Won the War
  - Hint #2, Give Peace a Chance

One More Example

- This picture is 25ppf/ 80ppm
- Can you identify him?
- Even if you can’t you can probably tell it’s a white man, brown hair, clean cut, wearing a black suit and a white shirt

Other Considerations

- If you are looking at the top of someone's head it's hard to see their face
- Make sure you have the right resolution camera for the area to be covered
- Image compression, and illumination can also play a role in the final image clarity

Thanks for Watching!

Next Month’s Topic:
Wide Dynamic Technology and Surveillance Applications

Report on Quality

Darrel Tisdale
Director of Quality

Sustaining Updates

- **Updates:**
  - Hardware revision: 5727 (new)
  - Firmware revision: 65210 (new)

- **New Features:**
  - Our new camera graphical user interface (GUI) webpage is now fully supported in Internet Explorer 9.0, Firefox and Google Chrome browsers
  - ONVIF Conformance

- **Improved Performance:**
  - Image Sharpness
  - Color Reproduction
  - Bit-Rate Limit Algorithm
  - Network Stability in Heavily Loaded Networks

Thank you!

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