Revisiting the 2017 Orbograph Client Conference Webinar

April 21, 2017 2PM ET

2017 ORBOGRAPH CLIENT CONFERENCE

DELIVERING THE FUTURE IN HEALTHCARE, CHECK AND PAYMENTS

Joe J. Gregory
Vice President of Marketing

Orbograph Client Conference

Where: The Westin Buckhead Atlanta

When: March 22-23, 2017 (Opening Reception on March 21, 2017 from 6:00-9:00 PM)

Why: To explore new solutions to real-world problems in healthcare revenue cycle management, check/payments and the financial industry

For Who: Strategic decision makers, product management, technical integration experts and technologists

Industries: Check processing, retail banking, wholesale banking, financial/healthcare payments and healthcare revenue cycle management

What to expect at the 2017 Orbograph Client Conference: Innovation, new products, industry research on major trends and opportunities, all delivered via distinguished keynote speakers, industry colleagues and Orbograph subject matter experts.

Our focus is YOU, the attendee! Our goal: communicate, educate and entertain all with a focus on solving problems and taking advantage of opportunities!

Webinar Goals

- High Speed Review of Client Conference Content
- Teaser for expanded content webinar
  - 30 Minute Power Sessions
- Questions…
  - Chat area below

Converging and Diverging Market Changes in Payments and Check
April 28, 2017 @ 2:00 PM EST
Duration: 30 Minutes

Healthcare Market Overview
May 3, 2017 @ 2:00 PM EST
Duration: 30 Minutes

Payments, Checks and Healthcare: A FinTech Perspective
May 5, 2017 @ 2:00 PM EST
Duration: 30 Minutes

Opportunities in Healthcare Reimbursements, Revenue Cycle Management and Electronification
May 9, 2017 @ 2:00 PM EST
Duration: 30 Minutes

Correspondence Letters & Denied Claims: An Ongoing, Yet Growing Problem
May 12, 2017 @ 2:00 PM EST
Duration: 30 Minutes

The Future is Now in Cloud Deployment for the Financial and Healthcare Industries
May 24, 2017 @ 2:00 PM EST
Duration: 30 Minutes

Conference Video

- https://youtu.be/a_W7-8GD2TY

Attendees

- Alogent
- Athena
- BB&T
- BNY Mellon
- Capital One
- Catalyst Corp
- Catch 21
- CCG-Catalyst Consulting
- CheckAlt
- Citizens National
- CommerceBank
- Connexx
- CrossCheck
- DSS
- Digital Check
- 5th 3Rd Bank

- FIS
- Fiserv
- Frost
- Iberia
- Infoscore
- Inmediata
- Innovative Healthcare Systems
- Intermex
- Jack Henry
- JP Morgan Chase
- MedSynergies/Optum
- Midfirst Bank
- Navigant
- Northwest Bank Technology
- Opex
- Panini

- Parascript
- PracticeAdmin
- RelayHealth
- Source Technologies
- South Nassau Comm. Hospital
- StratEx
- SunTrust
- Synovus
- TMR
- The FNB of Long Island
- The Private Bank
- Trizetto Provider Solutions
- Vsoft
- Vyne
- Wausau Financial Systems
- Wells Fargo

Speakers

Luke Huys
Senior Vice President, Wells Fargo

Greg Smith
Managing Director, FT Partners

Jeffrey Daigrepont
Senior Vice President, Coker Group

Mike Olson
Owner and Principle Consultant, RC Conserv

David Walker
President & CEO, ECCHO

Mark Riddle
Director, Research and Content Delivery, BAI

Tara E. Walker
Technical Evangelist, Amazon Web Services

Henri Cattier
Partner, Commonwealth Health Advisors

Bob Bowman
Associate Director – Transactions, CAQH

Orbonians

- Co- Presidents
  - Barry Cohen
  - Avikam Baltsan (CTO)
- Client Services
  - Stew Levine
  - Frank Devitta
  - Cathy Faucher
  - Boaz Ron
  - Brad Hudson
  - Derek Abbott
- Marketing
  - James Bi
  - Grace Dunklee Cohen

- Jeffrey Buechler, Finance
- Product
  - Yaron Katzir, Check
  - Roni Boker, Healthcare
  - Arik Elimelech, R&D
- Sales
  - Andy Leonhardt
  - Pat Cross
  - Don Samuels
  - Chris Shepard
  - Mike Gelbwachs
  - Phil Hetrick
  - Bryan Bruton

OrboGraph

Our Client Conference Promise

There Will Be No Lack of Information & Data Points!

Pre Conference Excitement!

Reception at The W Hotel
Pictures on Orbograph Facebook

Branding Excitement

OrboAnywhere
Check Processing

- Anywhere Recognition
- Anywhere Validate
- Anywhere Payee
- Anywhere Positive Pay
- Anywhere Fraud
- Anywhere Compliance

OrboGraph
Intelligent Payment Automation

OrboAccess
Healthcare Payments

- Access EOB Conversion
- Access Correspondence Letters
- Access Patient Payments
- Access Denial Intelligence
- Access Payment Reconciliation

OrboGraph
Intelligent Payment Automation

OrboGraph
Intelligent Payment Automation

And then??? More Excitement!

Horrific Lightning Storm!

OrboGraph

Conference #17 In 2017

OrboCAR™

PLEASE JOIN US FOR THE 2ND ANNUAL SYSTEM INTEGRATOR CONFERENCE

November 12 -13, 1998
Embassy Suites Hotel (Buckhead)
Atlanta, GA

Orbograph cordially invites you to attend this year's expanded System Integrator Seminar. Learn new technology with intense hands-on training sessions, covering the industries' hottest topics:

Topics of Discussion

- **OrboTool** ™ - Leading document definition tool
- **OrboCAR Gemini** ™ - Twin engine recognition software
- **Legal Amount Recognition** - Strategic implications

New Orleans 2013

Marketing Excitement

- New Website
- Banners
- Materials
  - Pens
  - Sports Bags
  - Padfolios
  - Business Cards
  - Business Card Holders

www.orbograph.com/app/

Conference Event Schedule

Tuesday, March 21, 2017

- 3:30 PM – 5:30 PM: Afternoon Activity & Social Event (Optional)
- 6:00 PM – 9:00 PM: Welcome to the Future: Evening Reception (Optional)

Wednesday, March 22, 2016

- 6:30 AM – 7:15 AM: Wake Up with Orbograph (Optional)
- 8:00 AM – 9:00 AM: Breakfast & Registration
- 9:00 AM – 9:45 AM: Synchronizing our Vision to the Industry
  - *Speakers: Avikam Baltsan & Barry Cohen, Co-Presidents of Orbograph*
- 9:45 AM – 10:30 AM: Converging

Synchronizing our Vision to the Industry   +

Converging and Diverging Market Changes in Payments and Check   +

Opportunities in Healthcare Reimbursements, Revenue Cycle Management and Electronification   +

Solving Payment

Synchronizing our Vision to the Industry   –

Speakers: Avikam Baltsan & Barry Cohen, Co-Presidents of OrboGraph

Rating
☆☆☆☆

Comments

Name

Submit

www.orbograph.com/app/

On To The Conference!

"Synchronizing Our Vision to the Industry"

Synchronizing Our Vision to the Industry

Co-President: Barry Cohen

Our Unique Role

Envision More. Achieve More.

OrboGraph delivers solutions to industries looking to automate posting, reduce manual processing, mitigate risk and leverage data for analysis. We automate these processes with intelligent recognition technologies so payment information can be used in downstream systems.

OrboGraph
Intelligent Payment Automation

To deploy technology enhanced by people that provides end to end solutions which deliver mission critical value to our customers

Our Markets

OrboAnywhere
Check Processing

Payments and Banking Industry

OrboGraph plays a vital role in today's payments and banking landscape. Over 1,600 financial institutions and corporations have deployed OrboGraph solutions across their enterprises to automate the process of depositing paper-originated negotiable items, i.e. checks, money orders, preauthorized drafts. Our software processes billions of checks and internal tickets per year across a wide range of Omnichannel workflows including: centralized proof of deposit, teller capture, branch capture, regional processing centers, retail remittance, wholesale lockbox, service bureaus, image exchange, remote deposit devices, Mobile RDC, ATMs, check cashers and point of sale devices.

OrboAccess
Healthcare Payments

Healthcare Industry

OrboGraph market penetration into the healthcare payment industry is impressive. Hundreds of healthcare providers, physician groups, hospitals, service bureaus, revenue cycle companies, billers, clearinghouses, financial institutions rely on our solutions to streamline and improve the revenue cycle by improving healthcare payment processing. We convert paper-based EOBs, correspondence letters and patient payments into electronic output to automate cash posting of receivables into patient management systems and hospital information systems. Additional modules reconcile payments and deliver advanced denial intelligence to companies looking to reduce denied claims and improve receivables.

The Markets we serve continue to have robust demand (Current USA volume)

- 18+ Billion checks (More later…)
- 1 Billion paper EOBs (More later…)
- 100 Million HC Correspondence items

Market Research - Hospitals

How EOBs Are Processed
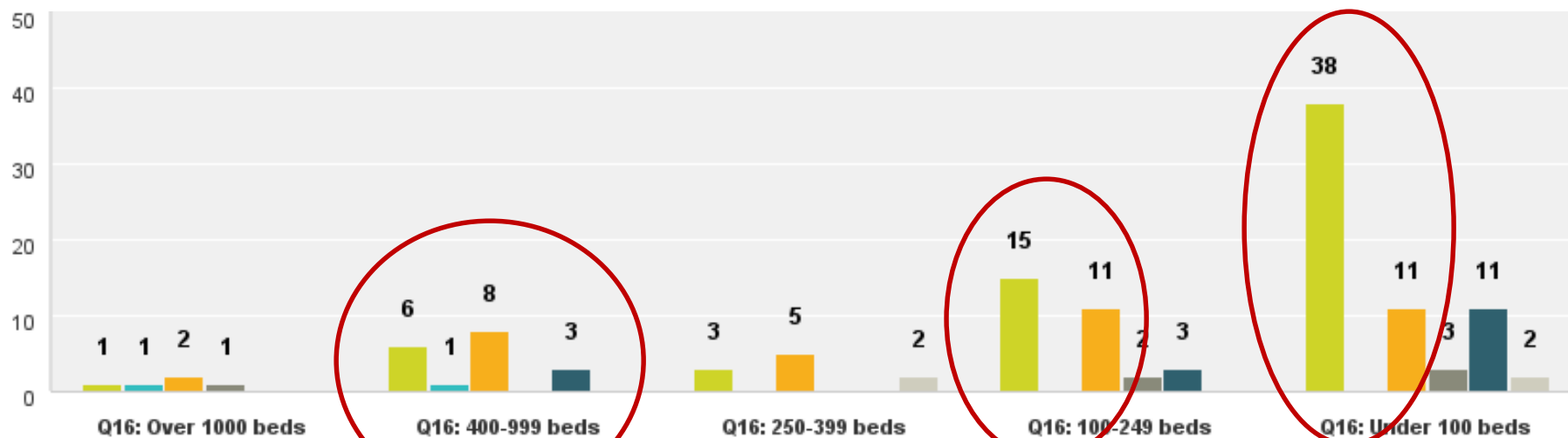
Market Research - Hospitals

Correspondence Letter Processing Satisfaction

Category	Value
No Comment	
Very satisfied	6
Satisfied	43
Unsatisfied	42
Very unsatisfied	9
No comment	5
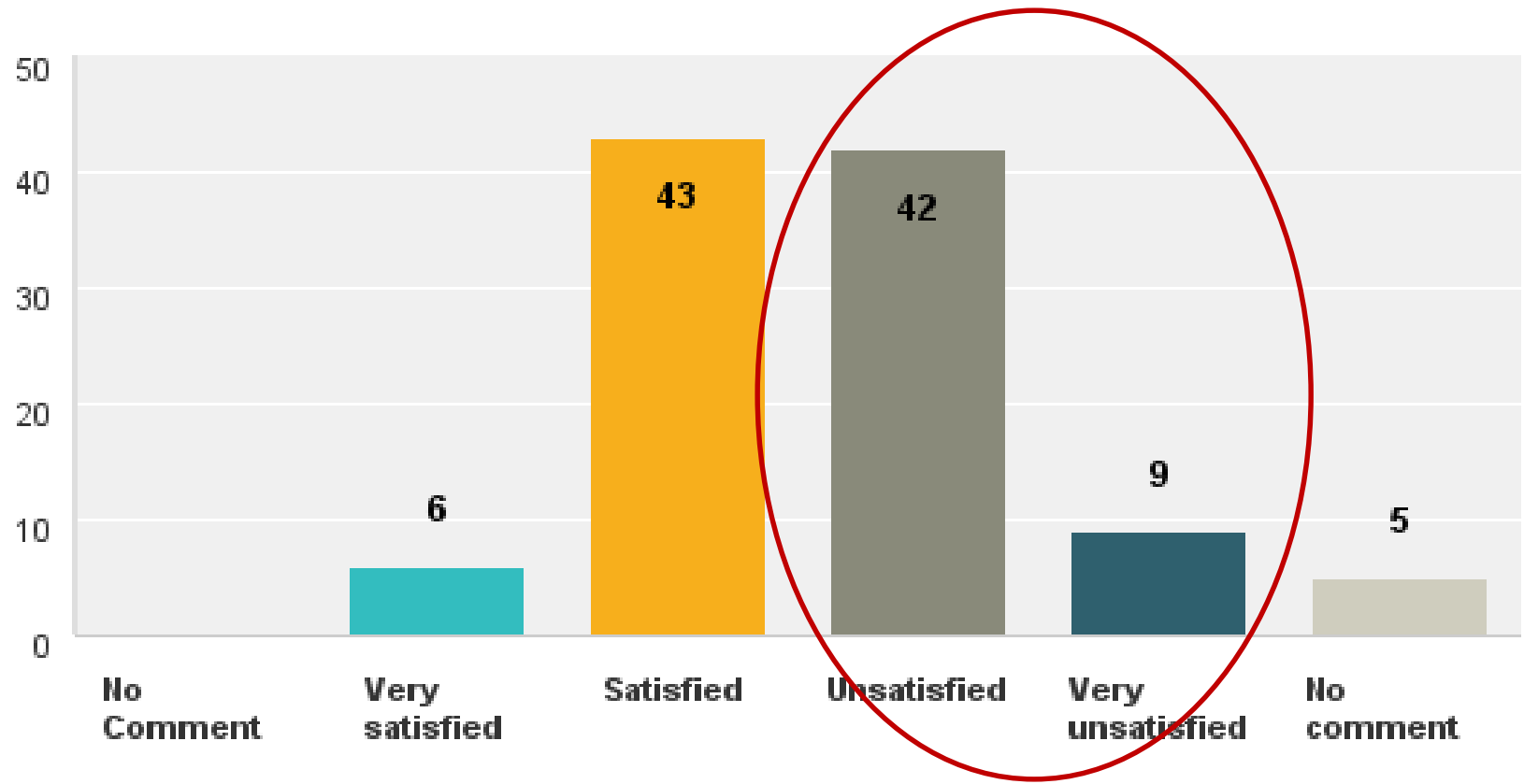
Going Forward

- Our commitment to the markets we serve remains stronger than ever

- We see convergence of the needs and deliverables between the markets.

- We are excited about the opportunity to leverage our ability to deliver even more value add products and services across these markets.

Synchronizing our Vision to the Industry

Avikam Baltsan, Co-President & CTO of Orbograph

2017 ORBOGRAPH CLIENT CONFERENCE
DELIVERING THE FUTURE IN HEALTHCARE, CHECK AND PAYMENTS

Our Products Evolution

- ## Check Amount Recognition Engines
  - OrboCAR, Gemini, Trinity, S.Trinity, Accura, Accura XV

- ## Check Fraud Solutions
  - PNV, Sereno

- ## Check Automation Solutions
  - Apex, Automation

- ## Anywhere
  - Validate, Payee & Positive Pay

- ## Orbograph Access suite of services
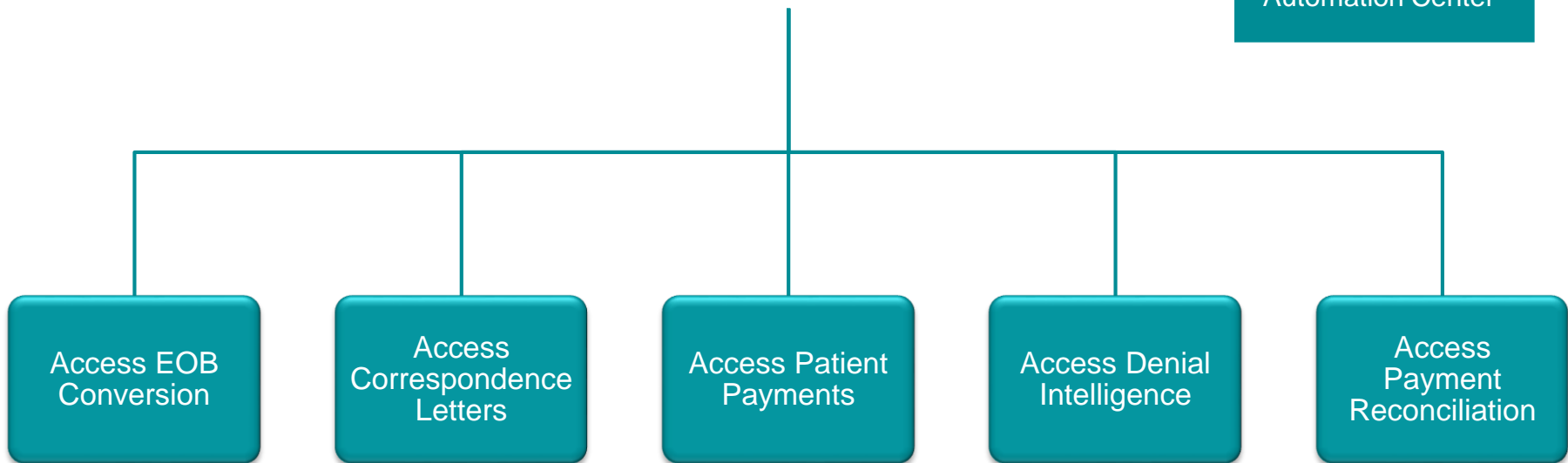 - EOR database, EOB/EOP, Correspondence, HPAC portal, EFT/ERA Re-Association, Archive, Denial Intelligence
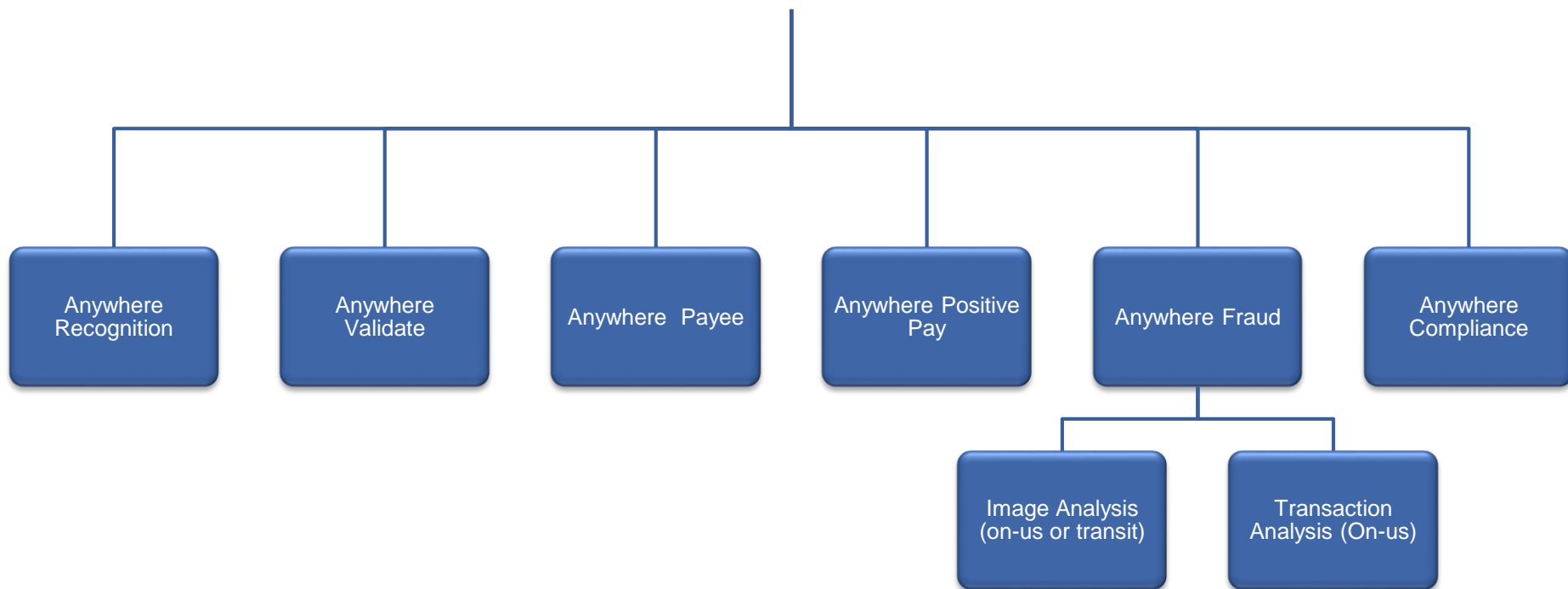
- ## State of the art OCR/ICR
  - In house development
  - Best of breed engine, leveraging also open source libraries and solution partners libraries
  - Evolving cooperation with the Israeli Academia on key topics, including machine learning

- ## Automation as a service
  - Key-Pay® technology for world wide manufacturing
  - Vast and long lasting offshore chain of suppliers
  - Private cloud (15 years) for check image processing
  - Public cloud (5 years) for EOB processing

- We continuously grow recognition scope
  - Started at field level (CAR/LAR)
  - Moved to check level (SERENO fraud)
  - Expanded to transaction level (EOB, Patient Pay)
  - Reached multiple transaction level (HRCM portal, Denial Analytics)

  - It's much more than reading (WYSIWYK). It's all about Document Understanding

  - We call it "*Intelligent Payment Automation*"

- Our organizational DNA is to endlessly perfect things…whatever it takes
  - Field recognition engine – 30 years
  - Key-Pay infrastructure – 15 years
  - Opti-Lift infrastructure – 5 years
- Execution and delivery of superior results

OrboGraph

- Support existing customer base: features, OS

- Still performance driven: improving read rates, accuracy levels, suspect reduction, automation

- New technologies: internal, academia, partners

- Infrastructure: web interfaces, validation features, OrboAnywhere platform

- OrboAnywere: 'cloud ready': Is the market?

- Keep an eye on trends: identify opportunities i.e. blockchain

OrboAnywhere
Check Processing

Intelligent Payment Automation for Check Processing
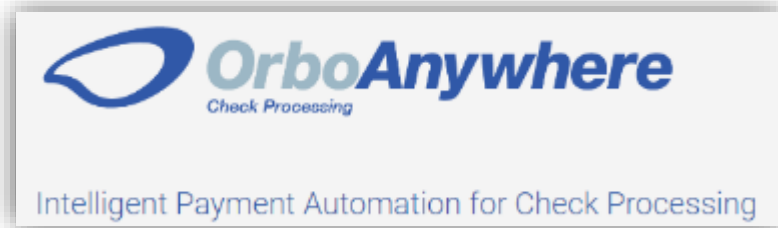
Investing in the Future in the Health Business

- Continuous process improvement: Opti-Lift technology, productivity, accuracy and TAT

- Machine learning technology to take process automation to the next level

- Scale out AWS infrastructure: larger volumes

- Business Intelligence: to the next level

- Healthcare "Payments" extensions

OrboAccess
Healthcare Payments

Intelligent Payment Automation for Healthcare Payments

Converging and Diverging Market Changes in Payments and Check

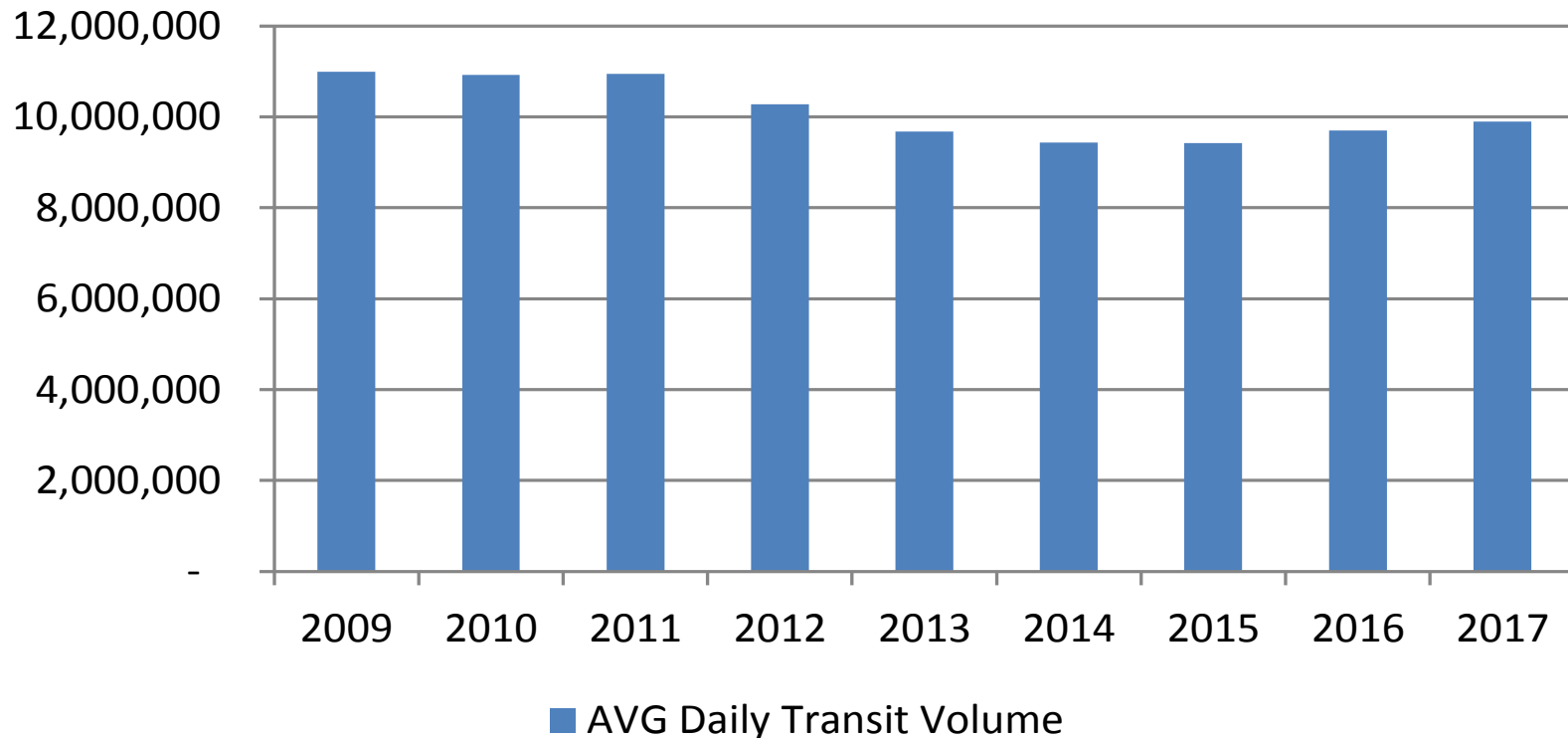**Image Exchange and Clearing Trends**

March 22, 2017

Luke Huys, Wells Fargo

2017 Orbograph Client Conference

Delivering the Future in Healthcare, Check and Payments
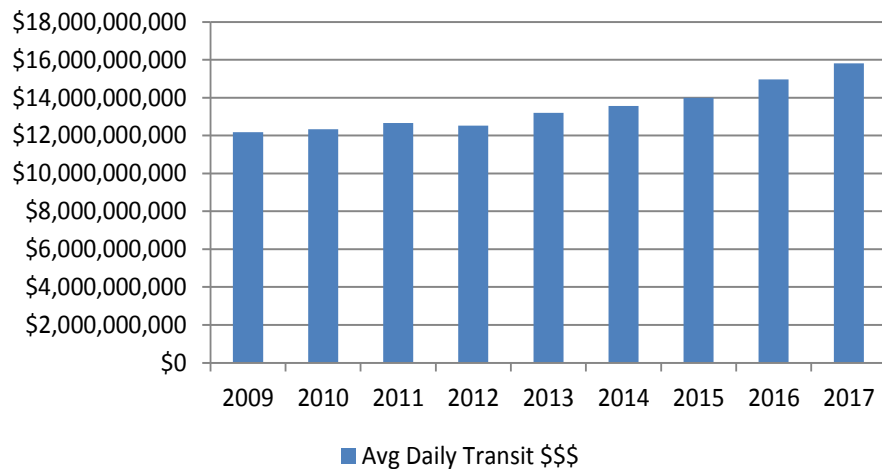
Avg Daily Transit Volume

WF has bucked the industry trend of check volume decline in recent years. We'll see later how this was due to growth in clearing services for other financial institutions.
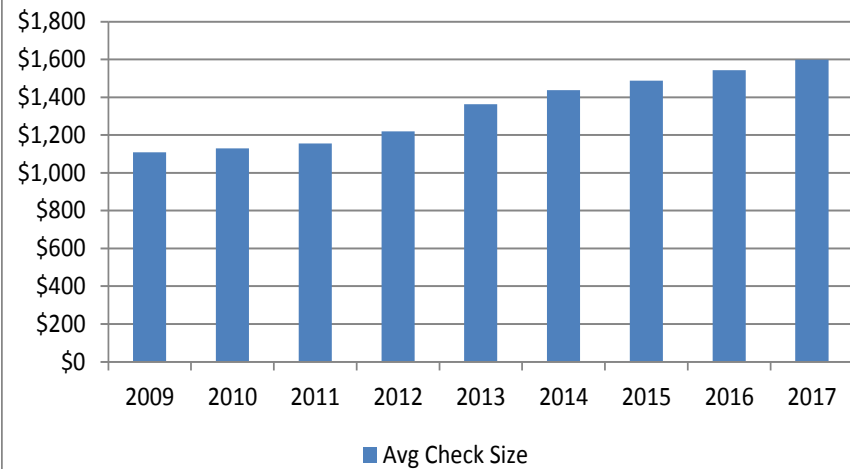
Transit Clearing Trends - Volume

Avg Daily Transit Dollars

Values (by year):
- 2009: ~$12,100,000,000
- 2010: ~$12,300,000,000
- 2011: ~$12,700,000,000
- 2012: ~$12,500,000,000
- 2013: ~$13,200,000,000
- 2014: ~$13,600,000,000
- 2015: ~$14,000,000,000
- 2016: ~$14,900,000,000
- 2017: ~$15,800,000,000

Legend: ■ Avg Daily Transit $$$

Avg Check Size

Values (by year):
- 2009: ~$1,110
- 2010: ~$1,130
- 2011: ~$1,150
- 2012: ~$1,220
- 2013: ~$1,370
- 2014: ~$1,440
- 2015: ~$1,490
- 2016: ~$1,540
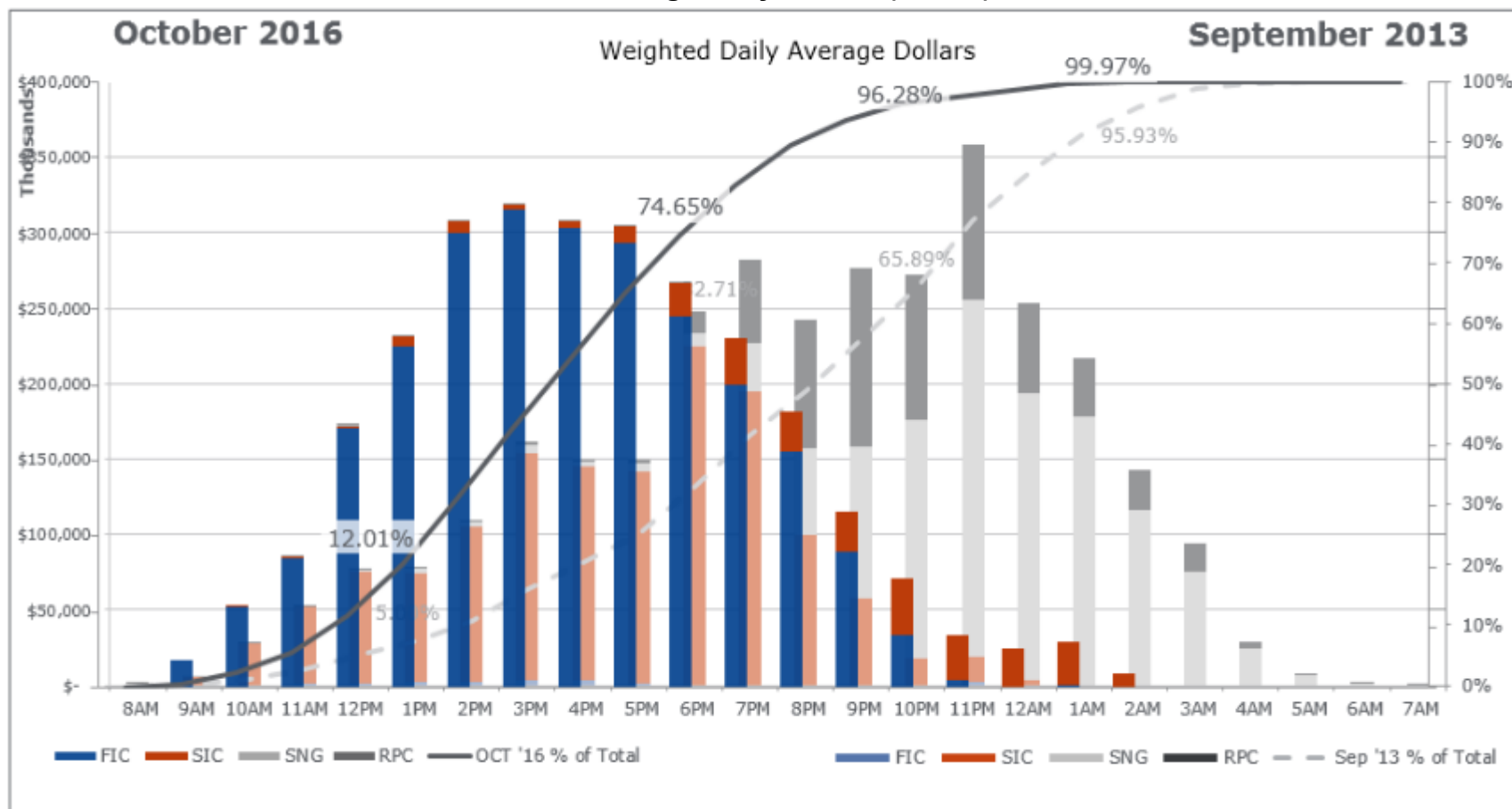- 2017: ~$1,600

Legend: ■ Avg Check Size

Transit dollars cleared have grown faster than item volume, as the average check size continues to grow each year at about a 4.7% annualized rate.

Float Reporting

AIF Processing Times
Average Daily Dollars ($000's)

Comment: Movement to earlier processing and clearing results from initiatives in branch, ATM and department check image delivery.
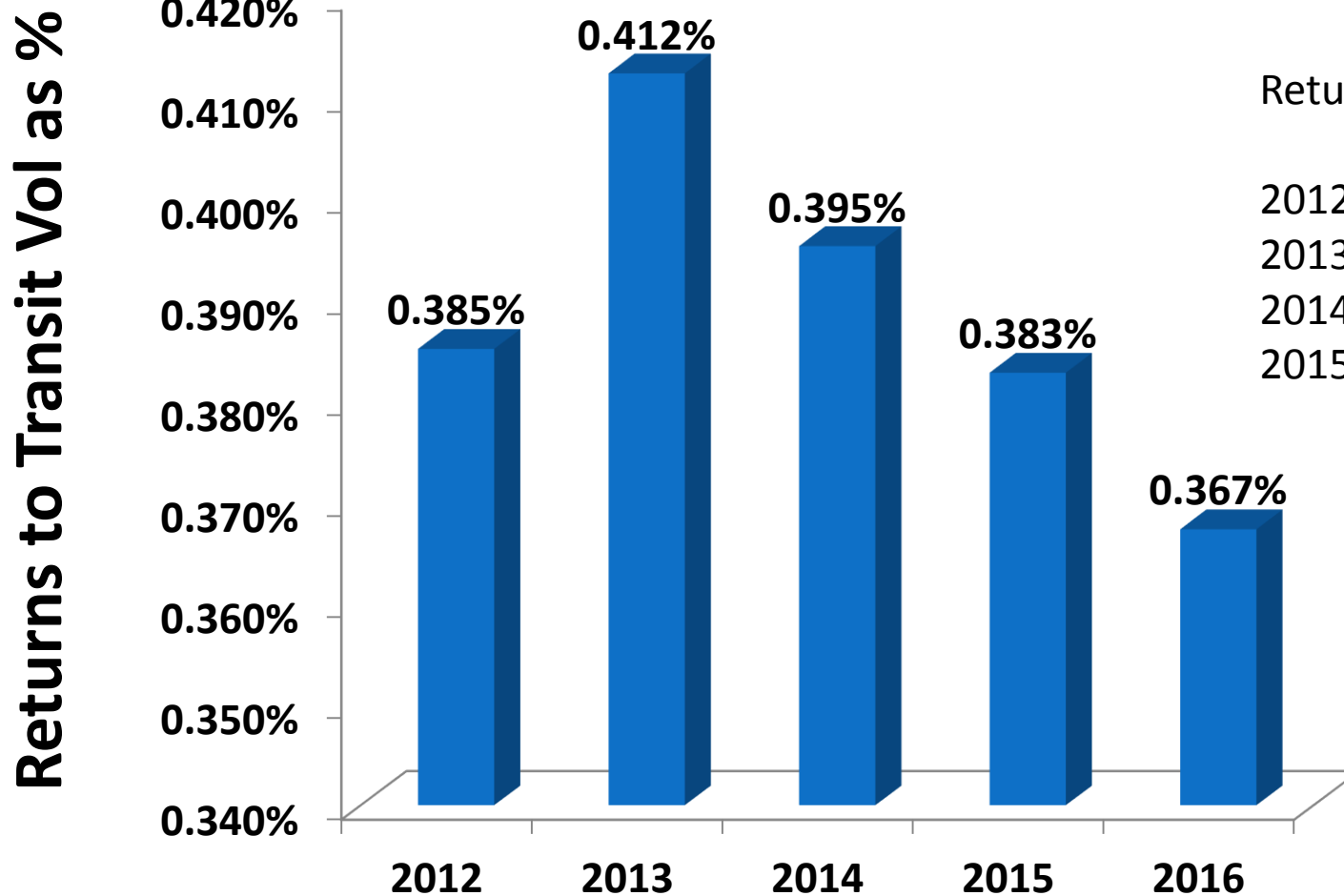
Check Adjustments

- Adjustment Types
  - Posted Twice
  - Image Issue
  - Amount / Keying Error
  - Listing Error
- Adjustment Sources
  - Mobile
  - ATM
  - RDC
  - Cash Vault
  - Teller Capture

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Industry U.S. % of Returns/Mo.

January - July

Returns to Transit Vol as %

- 2012: 0.385%
- 2013: 0.412%
- 2014: 0.395%
- 2015: 0.383%
- 2016: 0.367%

Return Rate Trend:

2012 - 2013:	.027%
2013 - 2014:	.017%
2014 - 2015:	.012%
2015 – 2016:	.016%

Sources: Federal Reserve, The Clearing House, Viewpointe, various individual banks and various correspondent banks

Monitoring Returns for Risk

- On a weekly basis, we monitor the number of returns sent to every BOFD routing number, looking for spikes the number of returns to that bank.

- We also monitor returns as a % of our forward volume on a given bank

- Where anomalies are noticed, we investigate the root cause, and collaborate with the Fed and other trading partners to determine if legitimate reasons for the increased returns activity exist.

- On multiple occasions over the last few years, fraudulent activity has been discovered and brought to a halt.

- Also, where increased activity is legitimate, we petition the Fed (with occasional success) to lower the price on that RTN to align with the its volume.

OrboGraph

Fed Intermediary - Check Presentment Image Flow and Timeline of Returns
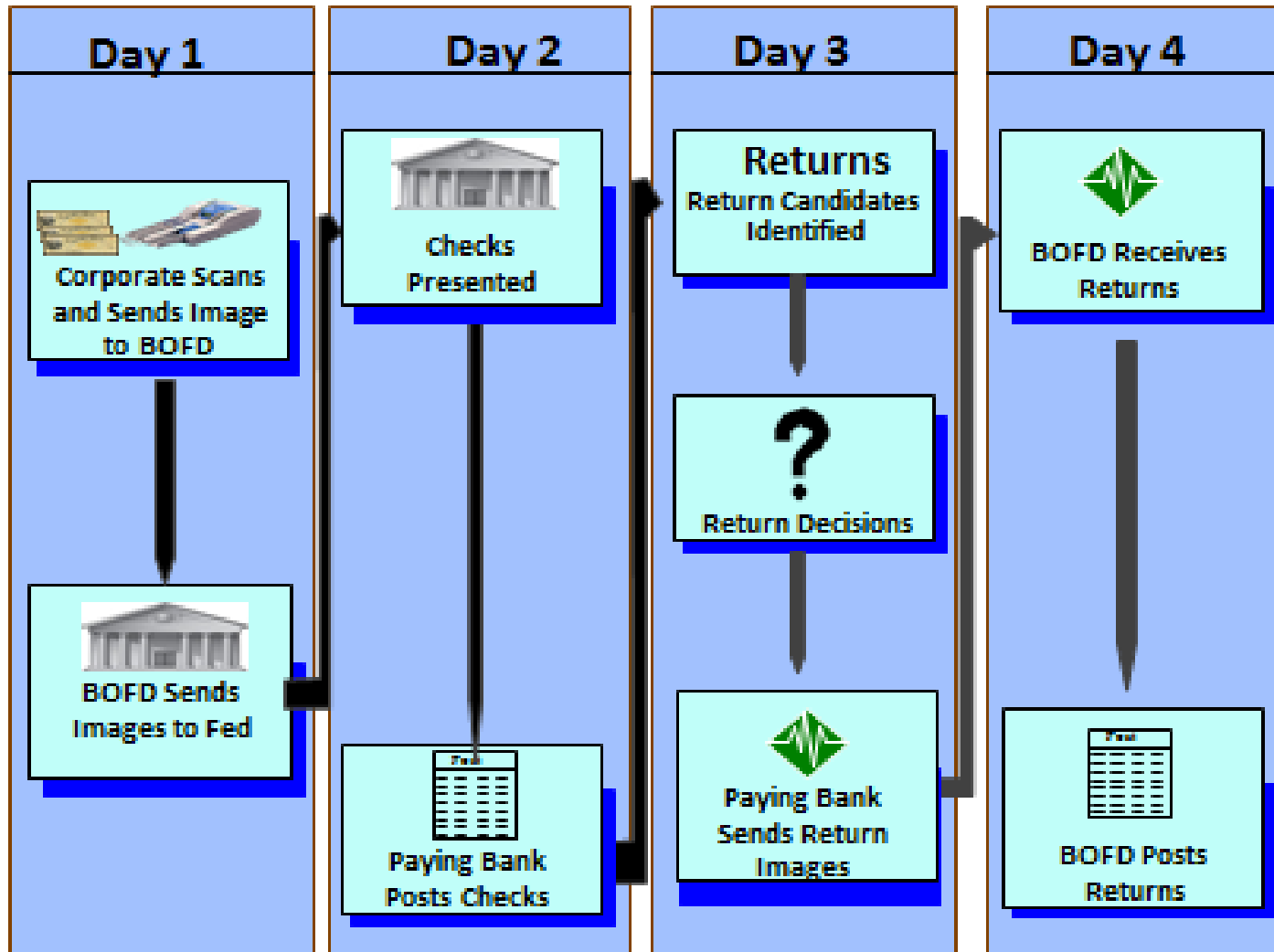
Direct Exchange - Check Presentment Image Flow and Timeline of Returns
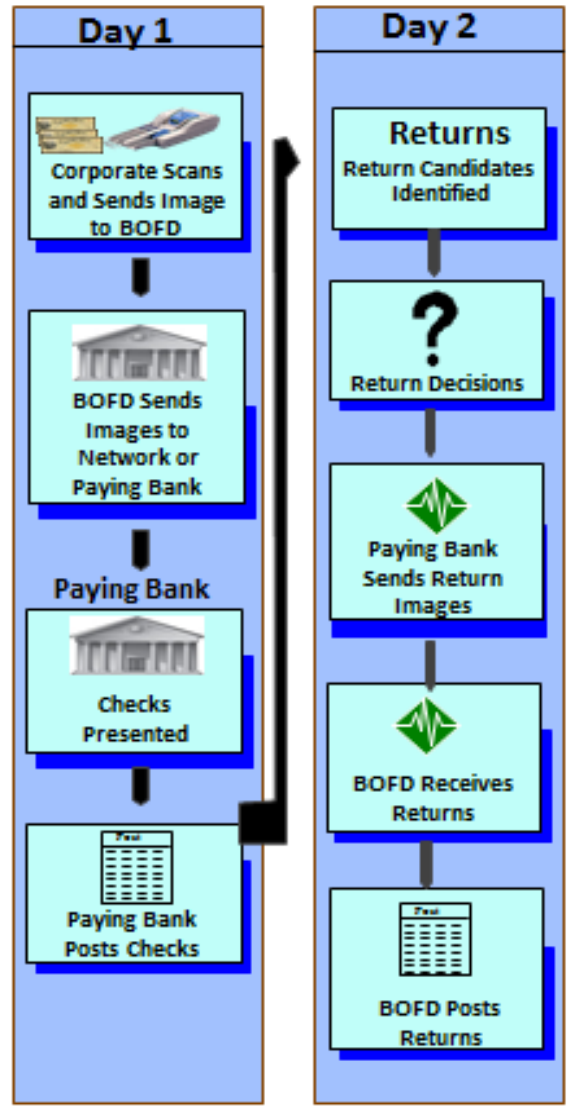
Overview of FT Partners

Overview of FT Partners

- Financial Technology Partners ("FT Partners") was founded in 2001 and is the only investment banking firm focused exclusively on FinTech
- FT Partners regularly publishes research highlighting the most important transactions, trends and insights impacting the global Financial Technology landscape. Our unique insight into FinTech is a direct result of executing hundreds of transactions in the sector combined with over 15 years of exclusive focus on Financial Technology

FT Partners' Advisory Capabilities

FT Partners' FinTech Industry Research

- In-Depth Industry Research Reports
- Proprietary FinTech Infographics
- Monthly FinTech Market analysis
- FinTech M&A / Financing Transaction Profiles

The Information

Named silicon Valley's #1 FinTech banker (2016) and ranked #2 Overall by *The Information*

Institutional Investor

Ranked #4 Most Influential person in all of FinTech in *Institution Investors* "FinTech finance 35"
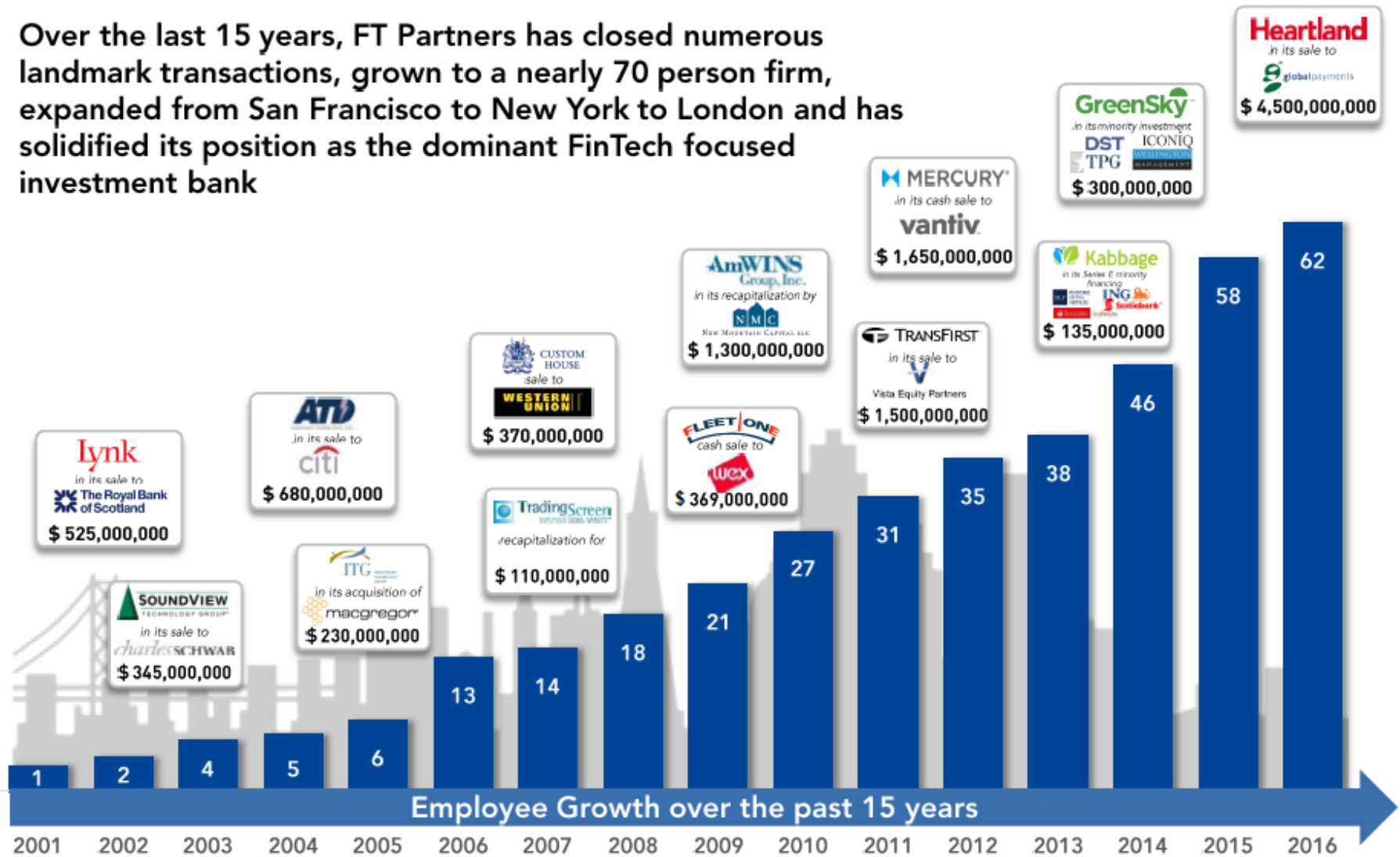
THE M&A ADVISOR

Numerous awards for Transaction Excellence including "Deal of the Decade"

Overview of FT Partners – 15 Years in Business

Over the last 15 years, FT Partners has closed numerous landmark transactions, grown to a nearly 70 person firm, expanded from San Francisco to New York to London and has solidified its position as the dominant FinTech focused investment bank

Employee Growth over the past 15 years

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	2	4	5	6	13	14	18	21	27	31	35	38	46	58	62

Heartland
in its sale to
global payments
$ 4,500,000,000

GreenSky
in its minority investment
DST ICONIQ
TPG WELLINGTON MANAGEMENT
$ 300,000,000

MERCURY
in its cash sale to
vantiv
$ 1,650,000,000

Kabbage
in its Series E minority financing
ING Scotiabank
$ 135,000,000

AmWINS Group, Inc.
in its recapitalization by
NMC
New Mountain Capital LLC
$ 1,300,000,000

TRANSFIRST
in its sale to
Vista Equity Partners
$ 1,500,000,000

CUSTOM HOUSE
sale to
WESTERN UNION
$ 370,000,000

FLEET ONE
cash sale to
wex
$ 369,000,000

Lynk
in its sale to
The Royal Bank of Scotland
$ 525,000,000

ATD
in its sale to
citi
$ 680,000,000

TradingScreen
recapitalization for
$ 110,000,000

SOUNDVIEW
TECHNOLOGY GROUP
in its sale to
charles SCHWAB
$ 345,000,000

ITG
in its acquisition of
macgregor
$ 230,000,000

FT Partners' Definition of FinTech

What is FinTech?

At its core, FinTech represents the *intersection of financial services and technology*. This

includes technology solutions that enable and improve the creation, implementation,

distribution and management of all financial products and services as well as technology

solutions that enhance internal financial-related processes for all businesses.

(7) FinTech Sectors:

Payments

Banking / Alternative Lending

Securities / Capital Markets / Wealth Tech

Insurance Technology

Financial Healthcare Information Tech

Financial Business Process Outsourcing

Financial Management Solutions

FT Partners – FinTech Sector Coverage

FinTech Ecosystem Overview
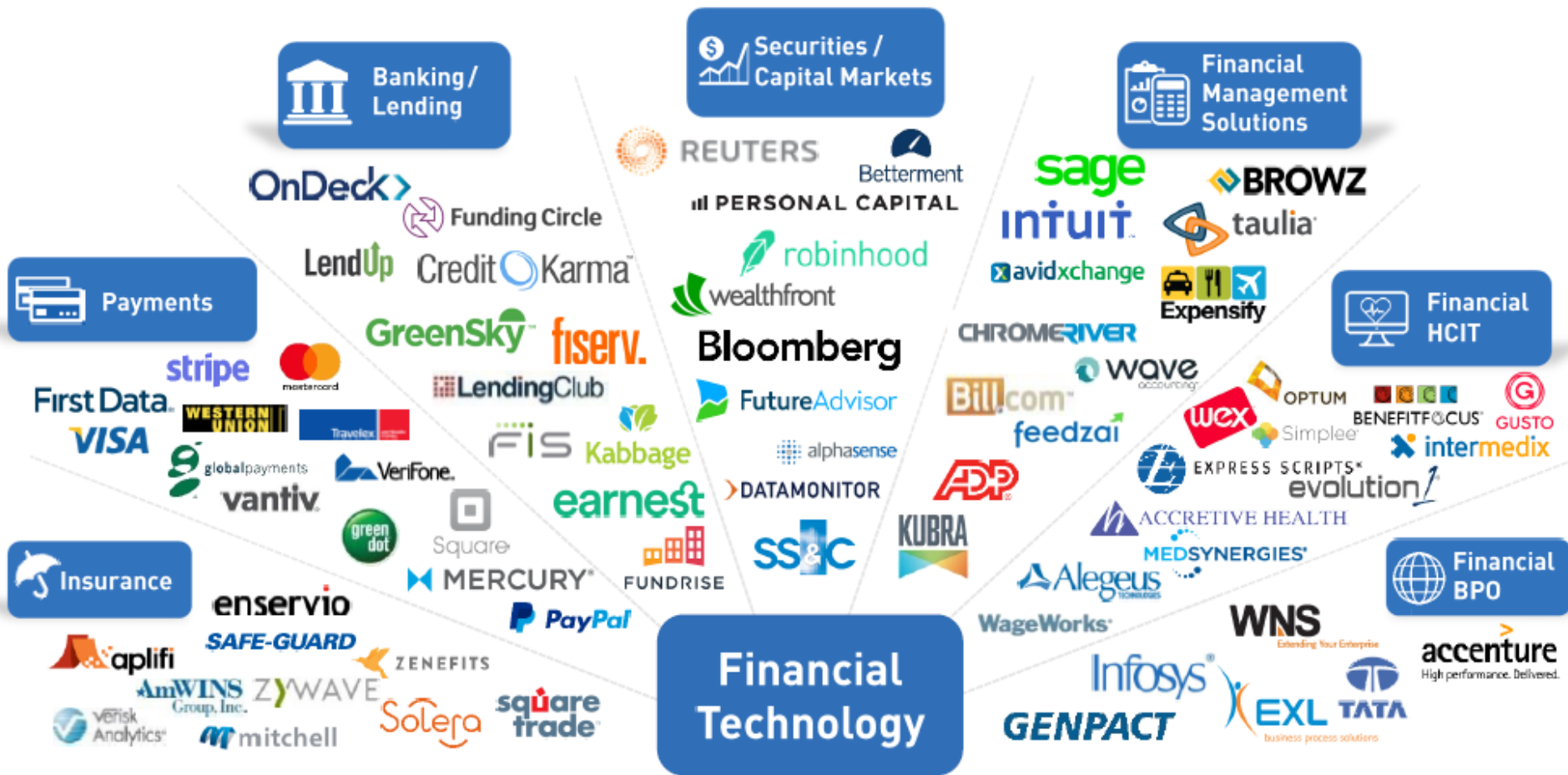
FinTech Deal Activity in 2016

2016 *in Review*

Financing	M&A
Approximately	*Approximately*
$28 billion	**$85 billion**
in financing volume	in M&A volume
&	**&**
1,500+	**900**
transactions	transactions

Record highs for both 2016 global financing volume and number of transactions with financing volume up *30%* from 2015

Total global M&A volume and deal count were down in 2016 compared to both 2015 and 2014, but both still rank higher than any other prior year

FinTech Financing Statistics

Global FinTech Financing Volume by Year

2016 was a **record year** for FinTech financing – Global FinTech Equity Financing volume reached **$27.7 billion**

Year	Volume
2010	$5.1
2011	$5.4
2012	$6.9
2013	$6.3
2014	$17.1
2015	$21.3
2016	$27.7

$ in billions
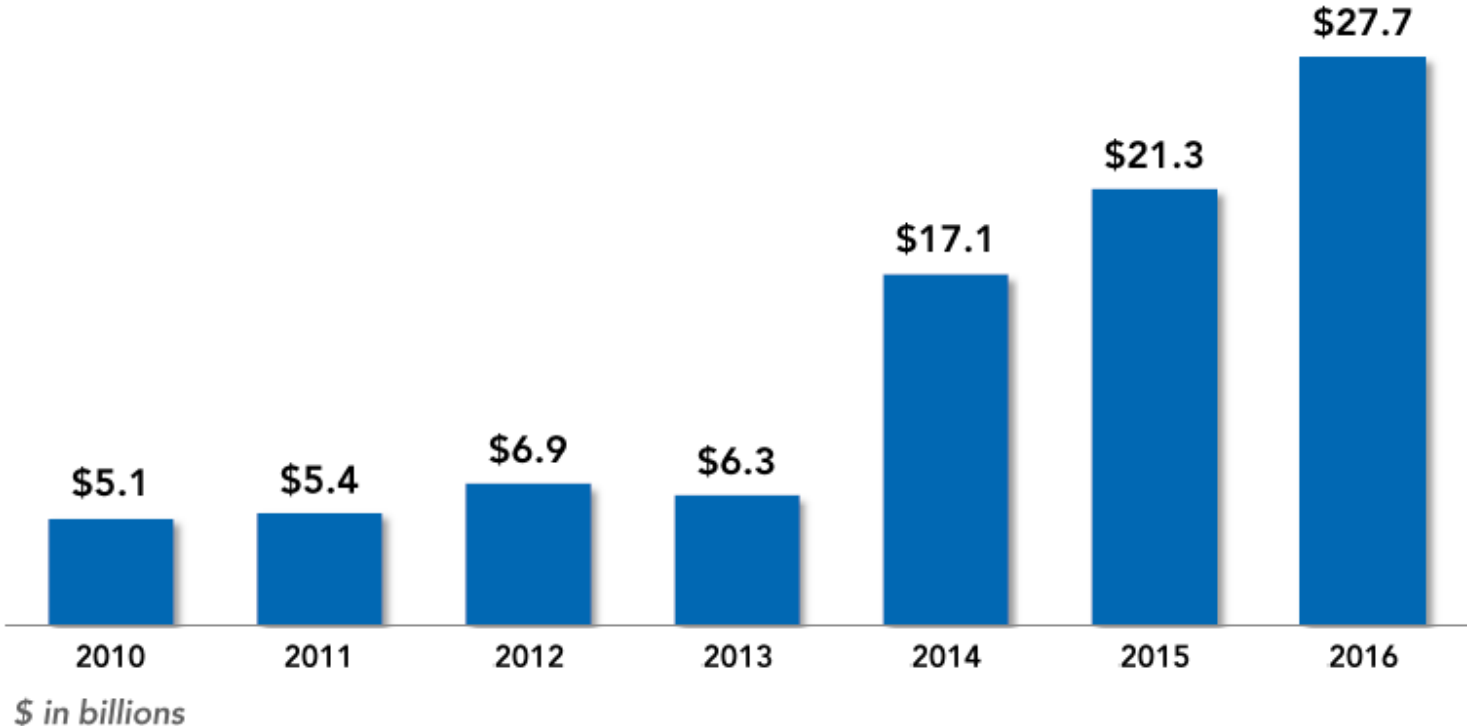
Source: FT Partners' Proprietary Transaction Database.

Acquisitions in the Space – Case Study of RDM's Sale

Expect to see more consolidation around check-related processing / technology

Financial Technology Partners LP
FTP Securities LLC

is pleased to announce its exclusive role as
sole strategic and financial advisor to

RDM®
Transforming Payments

in its sale to

DELUXE

for total consideration of

C$ 129,000,000

FINANCIAL
TECHNOLOGY
PARTNERS

The Only Investment Bank
Focused Exclusively on Financial Technology

RDM

- RDM provides solutions for business-to-business (B2B) electronic payment processing
- Offers both cloud software and hardware based solutions for end-users in the financial services, insurance, healthcare, industrial, retail and other industries

PAYMENT PROCESSING

RDC Web Solutions

RDC Mobile Solutions

DIGITAL IMAGING SOLUTIONS

Check Scanners

DELUXE

- Deluxe is one of America's best known check brands and also provides a suite of customer life cycle management solutions and other business and payment services

For Financial Institutions

- Marketing & New Account Services
- Onboarding & Adoption of products

- Customer Engagement
- Banker's Dashboard

For Small Businesses

- Checks & Business Services
- Website & Online Marketing

RDM will become part of the growing suite of Treasury Management Solutions offered by Deluxe, bringing its robust suite of payments remittance processing and digital imaging software and scanner hardware and to Deluxe's offerings

Source: Company Websites

Acquisitions in the Space (cont.)

March 2017

Vista Equity Partners has agreed to acquire DH Corp for an Enterprise Value of **$4.8 billion** … to combine it with Misys [1]

September 2016

Digital Check acquires Check-Scanning Assets from Burroughs; the purchase includes people, products and expertise

July 2013

DH Corp agreed to acquire Harland Financial Solutions for **$1.2 billion**, adding a suite of FinTech products for Banks and Credit Unions
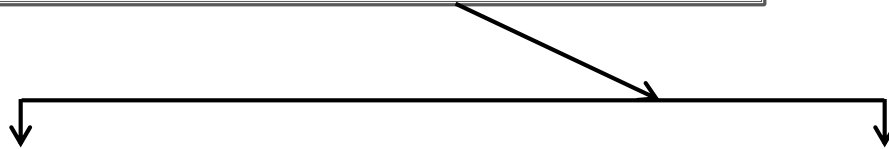
April 2016

Battery Ventures acquires Alogent Product line from Jack Henry & Associates; the Spinout of the unit to help with Alogent's reach and expansion

Opportunities in Healthcare Reimbursements, Revenue Cycle Management and Electronification

Healthcare Trends in Automation, Regulations and RCM

Jeffery Daigrepont, SVP

Coker Group, LLC

2017 ORBOGRAPH CLIENT CONFERENCE

DELIVERING THE FUTURE IN HEALTHCARE, CHECK AND PAYMENTS

Coker Group

Coker Consulting

- Acquisition Due Diligence
- Clinical Alignment
- Post-Merger Integration
- Revenue Cycle Mgmt
- Executive Search
- Coding and Compliance
- Medical Staff Development

Coker Financial Services

- Fair Market Valuations
- Transaction Services
- Compensation Planning
- Physician Practice Acquisition and Integration

Coker Technology

- Systems Procurement
- Vendor Contracting
- Regulatory & Compliance
- IT Outsourcing
- Managed IT Services

Investment Banking

- Mergers & Acquisitions
- Capital Solutions
- Financial Advisory

Current State of the Market

Your New Health Care System
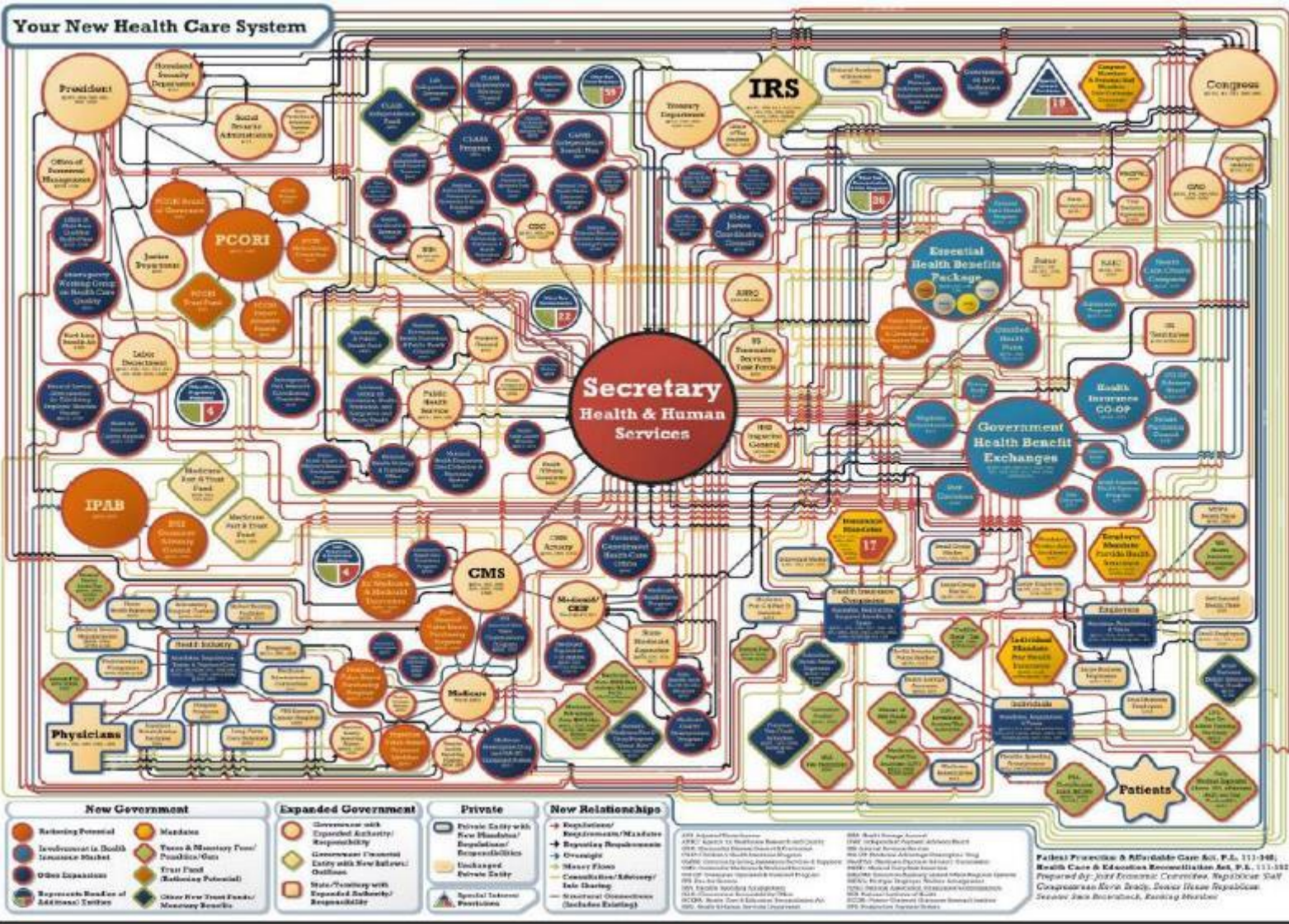
Healthcare is Undergoing a Seismic Change Paradigm Shift in Managing Care and Cost

Disruption

Healthcare cost is a global crisis

Healthcare quality is inconsistent across care delivery and does not correlate with cost

Value Migration

Revenue model (FFS) threatened

Reimbursement model (Payers) threatened

ACOs … risk management & cost containment

Information & Analytics a must
- Patient engagement
- Population versus Episodic Care

Market Response

Market consolidation

Vendor consolidation

Maturing product markets

EMR versus community solutions

Monolithic versus Modular

Proprietary versus Open

US Physician Population*

	1990	1995	2000	2013
Total Physicians	615,421	720,325	813,770	941,304
Hospital-Based	142,875	154,856	157,032	169,337
Residents / Fellows	92,080	96,352	95,725	98,688
Full-time staff	50,795	58,504	61,307	70,649
% of total - full-time staff	8.3%	8.1%	7.5%	7.5%
% growth in hospital-based		8%	1%	7%
Physicians by Activity, 1975-2010, p. 406				
AMA and Coker Group, 2010				

•*This data was included to reflect the updated number of practicing physicians in the US.*

OrboGraph

The Market Penetration into Hospitals

Pie chart (n=3,655):
- Allscripts 2%
- Cerner 12%
- CPSI 11%
- Epic 12%
- GE Healthcare 1%
- Healthland 6%
- HMS 6%
- McKesson 9%
- MEDITECH 20%
- QuadraMed 1%
- Siemens 6%
- Other 6%
- None 8%

OrboGraph
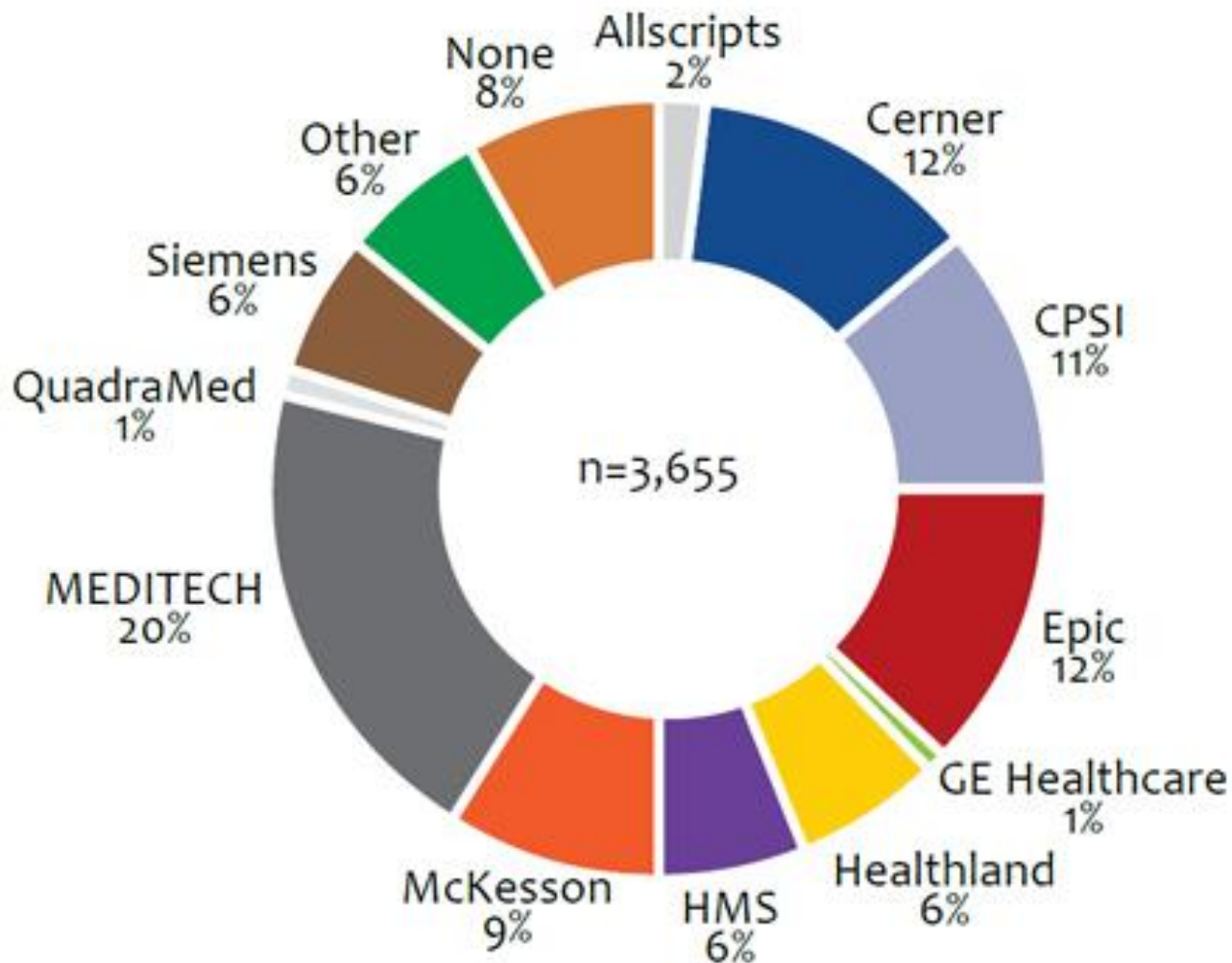
Dashboard Tools / Analytics

TRENDS IN RCM AND CLAIMS MANAGEMENT

RCM Market Outlook

- A new MicroMarket Monitor report projects that the North American RCM market will:
  - Grow from $20.5 billion in 2015 to $40.44 billion by 2021
  - Experience a CAGR of 12 percent from 2016 to 2021
  - Most of the RCM market is held by small mom and pop shops who operate on a local level.

- Why?
  - Billing rules continue to get more complex
  - More education and time required to code, bill and collect
  - Qualified RCM staff can demand $80k+ annual salary
  - Providers must maximize billing/collections to survive

OrboGraph

2016 GDP (Billions of US $)
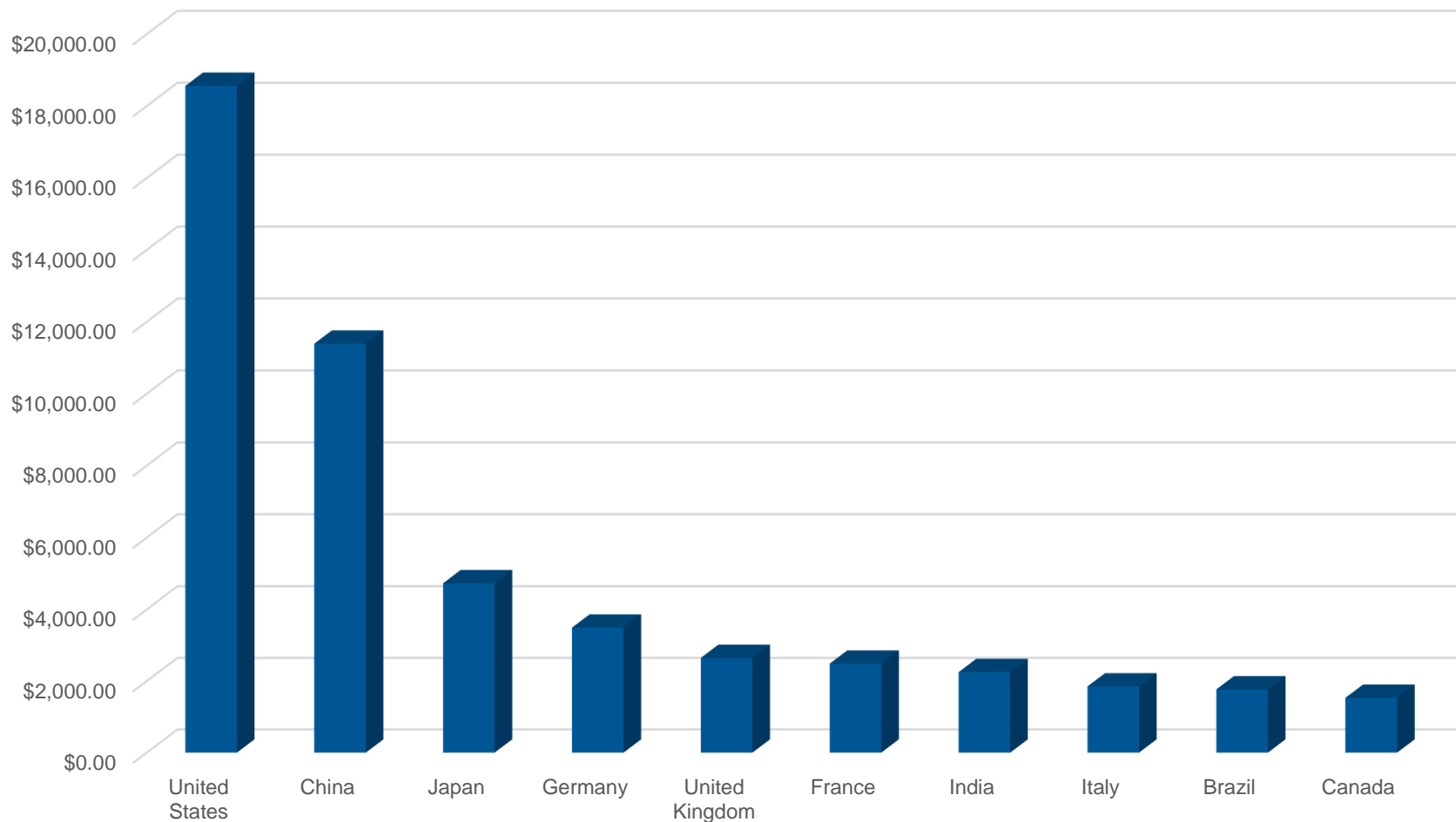
Source: www.imf.org

US Healthcare Expenditures as its own GDP

2016 GDP (Billions of US $)
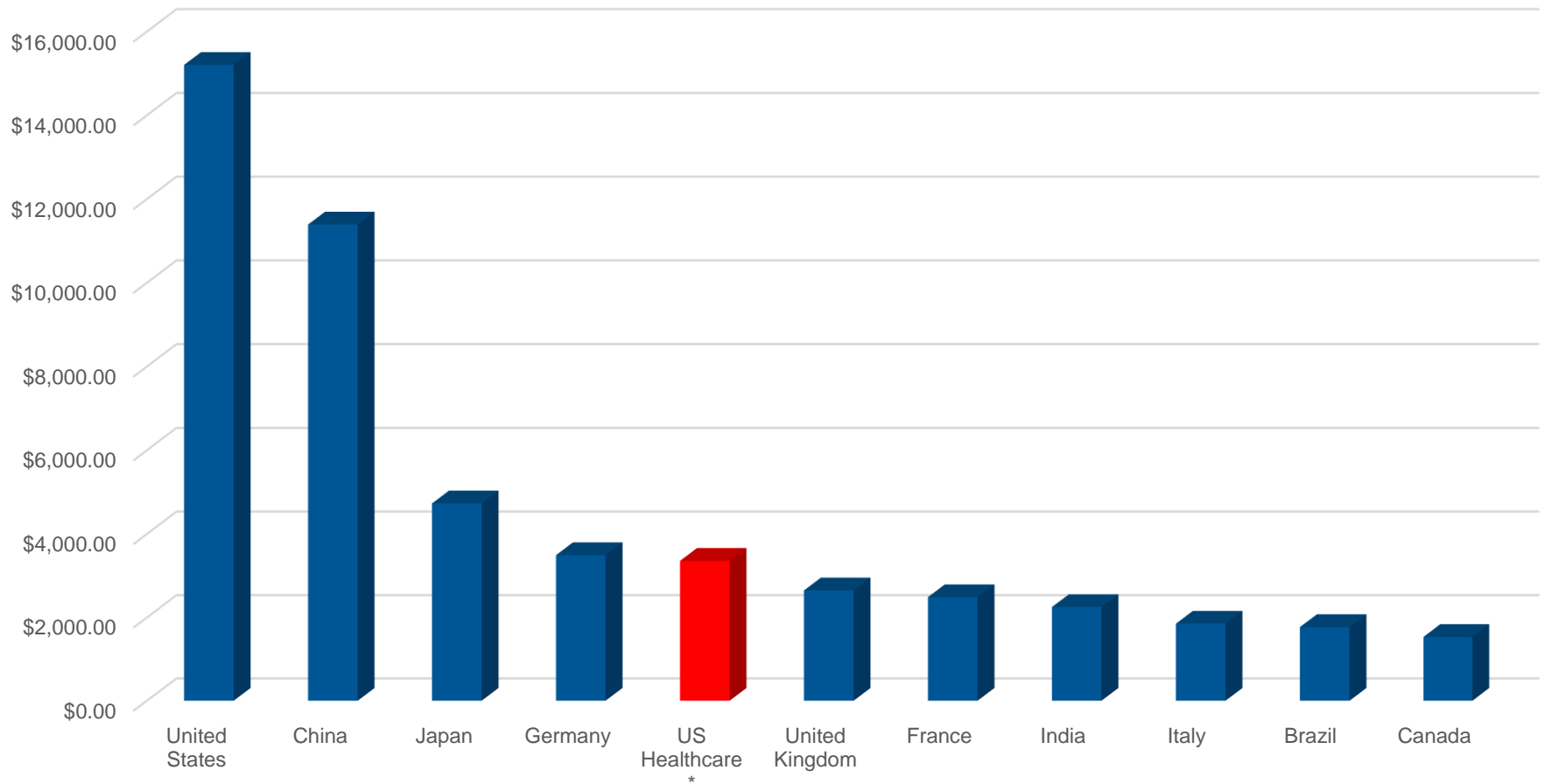
* Estimated

Consumerism Forcing Change (POS)

9 in 10 consumers want to know payment responsibility at the point of care

In 2015, 87 percent of providers said that they collected some amount of money at the point of service for the majority of their patient visits. When they did not collect at the point of service, 41 percent said that it was due to uncertainty of the amount due, while 29 percent said that it was due to patient resistance to pay.

87%

- Most of the time
- Some of the time
- Rarely
- Never

87% of providers collected some amount of money at the point of service

41%

- Uncertainty of amount due
- Patient resistance
- Not applicable
- Time consuming
- I do not accept payment cards
- No point of service

41% of providers did not collect because they were uncertain about the amount due at the point of service
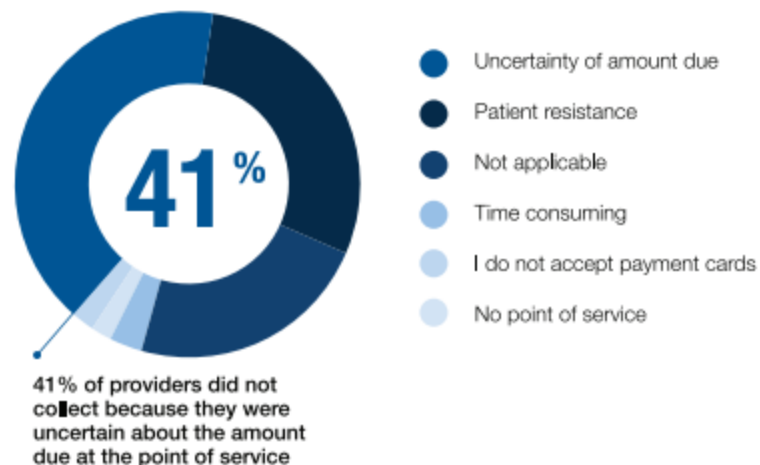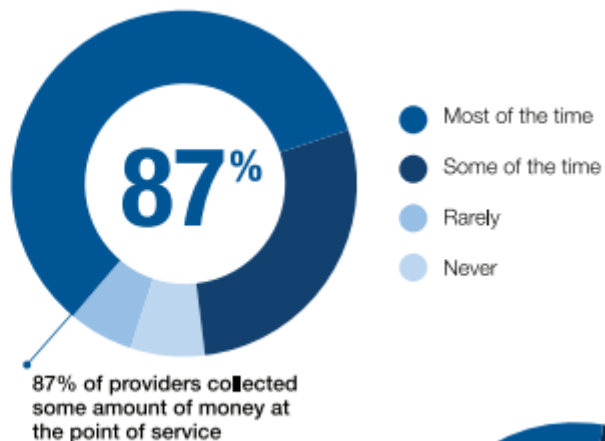
Source: InstaMed - Trends in Healthcare Payments Sixth Annual Report: 2015

OrboGraph

Healthcare Transactions

Transactions	Manual Processing Cost	Electronic Processing Cost
Claim Submission/Receipt	$2.64	$0.68
Eligibility Benefit Verification	$8.39	$0.49
Prior Authorization	$11.18	$1.93
Claim Status Inquiry	$9.79	$1.85
Claim Payment	$3.46	$0.78
Claim Remittance Advice	$6.19	$1.00
Claim Attachments	$6.99	$1.27

Estimated $9.4 billion in savings by moving to electronic transactions

Source: http://www.caqh.org/sites/default/files/explorations/index/report/2016-caqh-index-report.pdf

OrboGraph

EFT/ERA Mandate effective 1/1/2014

- ## EFT (electronic funds transfer) & ERA (electronic remittance advice)
  - Requirements
    - All commercial payer adoption
    - Ability to accommodate payment via ACH
    - ERA must contain trace re-association number (TRN)
    - Payments within 3 days of ERA
    - Provider must request EFT/ERA standard from Payer
  - All Medicare payments via EFT

Resolves obstacles:

- Administratively difficult enrollment
- Ability to re-associate payment to ERA
- Time lag between payment information and payment receipt
- Advantages:
  - Save time and expense when posting payments
  - More efficient reconcilement
  - Improved working capital
- Challenges:
  - Difficulty in matching EFT's and ERA's
  - Smaller payers unable to provide ANSI standard 835's

Paper to Electronic

Paper to Electronic

Source: http://www.caqh.org/sites/default/files/explorations/index/report/2016-caqh-index-report.pdf
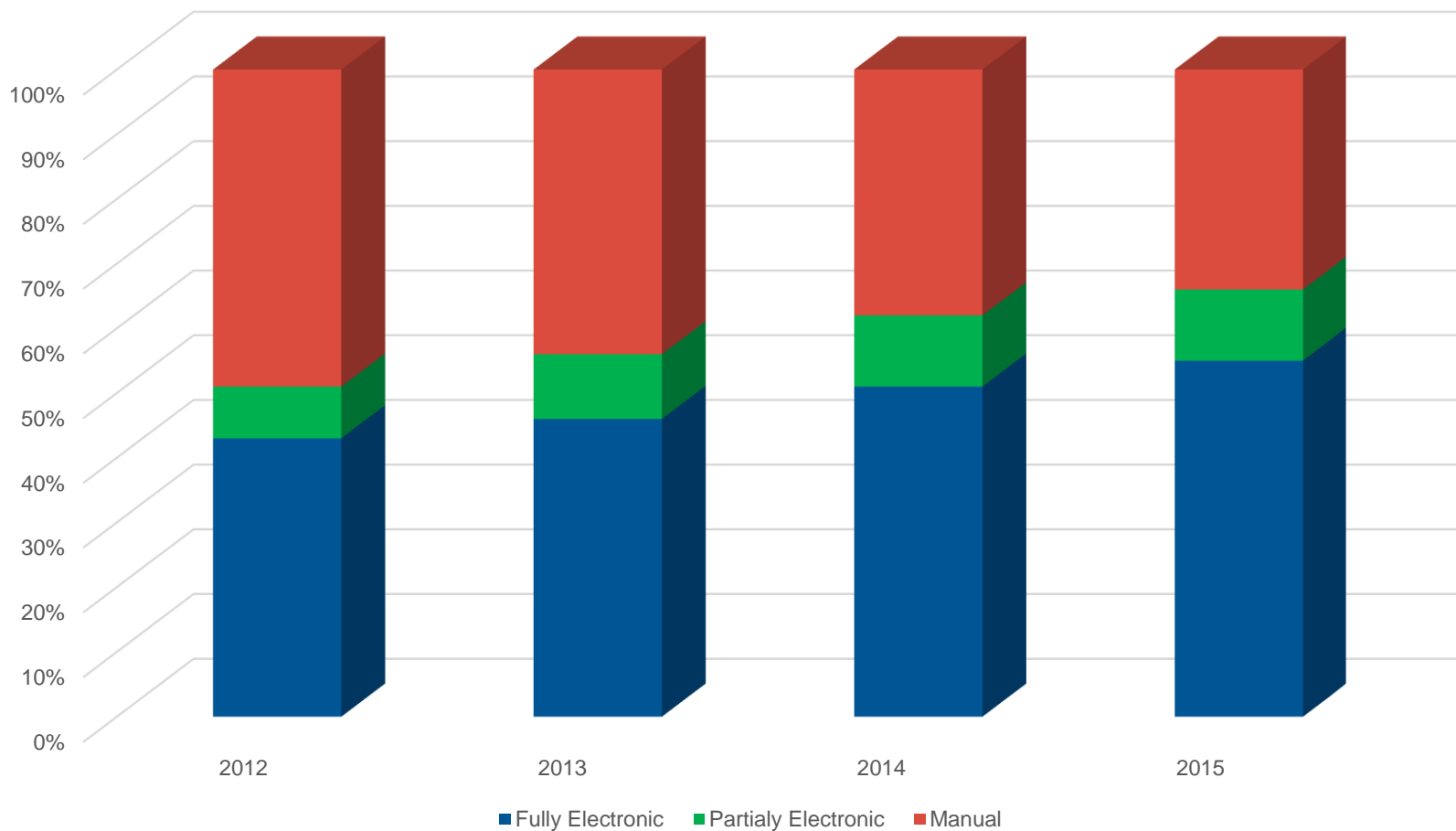
MACRA

- Medicare Access and CHIP Reauthorization Act of 2015 (MACRA)
  - Replaces fee for service and SGR
  - Designed to expedite the move to value based payments
  - By 2019 Physicians will be assigned to one of two payment models (Quality Payment Programs – QPP)

| performance year | submit | feedback available | adjustment |

| 2017 | March 31, 2018 | 2018 | January 1, 2019 |

A Banker's Perspective

- Banks have a unique position in healthcare
- Banks will continue to offer RCM services
  - Services will have to adapt to handle emerging payment models
    - Look to strategic partners
  - Banks will look to minimize risk and exposure
    - Less white label, more referral
- Focus on patient payments
  - Employer engagement
  - Card opportunities
  - Non traditional financial services

Solving Payment Negotiability in the New Era of Branch Transformation, Self Service and Workflow Innovations

Making Sense of Payment Trends/Future

By David Walker

ECCHO – dwalker@eccho.org

Who is ECCHO?

- **ECCHO is:**
  - A not-for-profit mutual benefit corporation
  - UCC clearinghouse
  - Owned by its member financial institutions
  - Largest FI member organization in the U.S. in terms of total deposits held by its members - ~80% of total U.S. deposits
  - Most diversified FI member organization in the U.S. not associated with a service provider
    - Membership includes credit unions, corporate credit unions, community banks, bankers banks, mid-tier FIs and large Fis
    - Only time in history

OrboGraph

Making Sense of Payments Trends

- **Why are Check Image Rules Needed?**
  - No comprehensive default law to address check image payments

- **Uniform Commercial Code (UCC)**
  - Basis for most paper check law – State Law

- **Regulation CC**
  - Supplements UCC legal provisions for paper checks – Federal Law

- ***Neither UCC nor Reg CC Addresses Check Image Exchange Provisions***

OrboGraph

Making Sense of Payments Trends

Chart: $ in Trillions

	2015	2016
Checks Paid	$27.3	$27.4
GDP	$18.0	$18.6
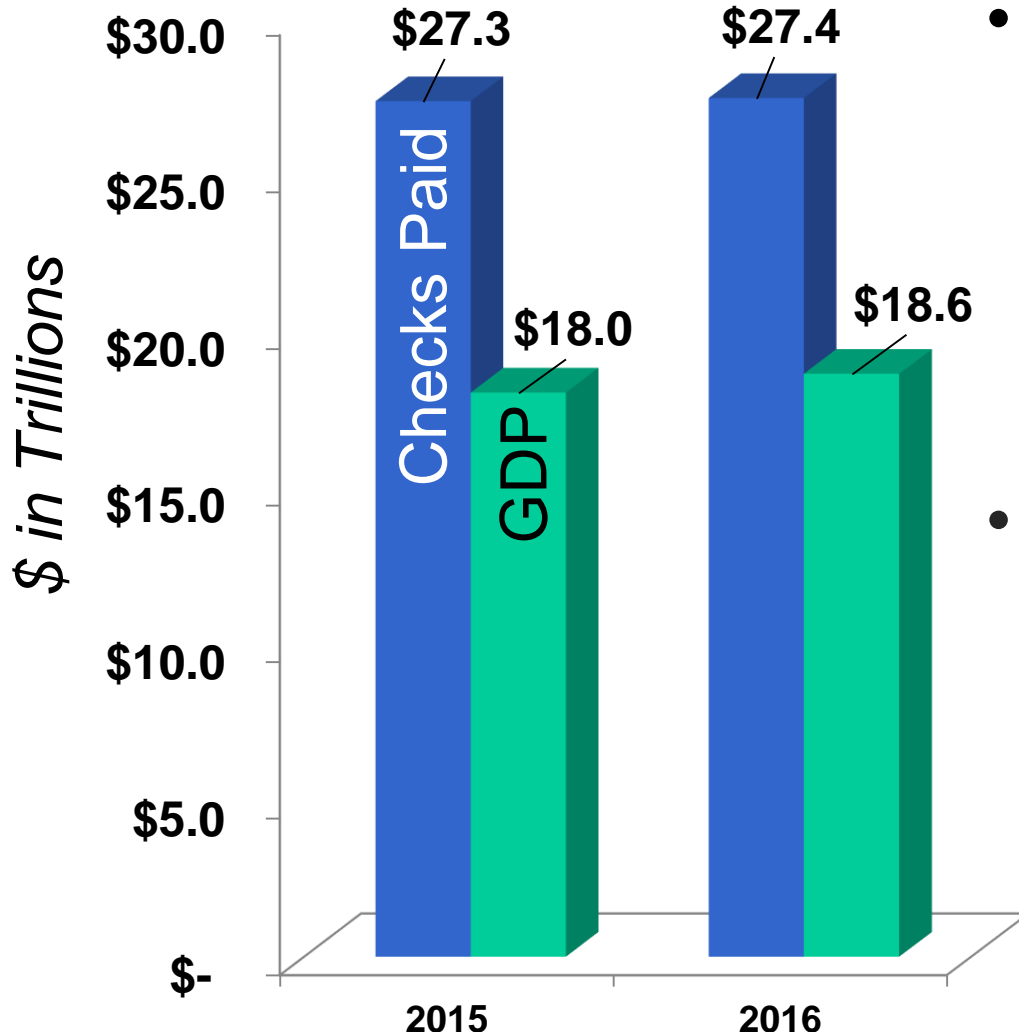
- **At $27.4 Trillion, Checks Totaled 147% of U.S. GDP in 2016!**

- ***GDP**- Gross domestic product (GDP) is the monetary value of all finished goods and services.

*Sources: GDP –Bureau of Economic Analysis, Dept of Commerce – CheckImageCentral

- ## How Much is Check Declining?
  - Federal Reserve, in its Triennial Payments Study that transit checks totals **12.9** billion

  - ECCHO reported (Checkimagecentral) total transit volume in 2012 was **16.0B**

  - **Represents a 3.1 billion differential = 24% (shortfall in triennial report)**

  - ECCHO immediately encouraged the Fed to reevaluate its estimated check volumes

OrboGraph

- ## Impact of Fed's Revisions
  - If transit volume in 2015 was 12.7B and 12.9B in 2012:
    - **Annual decline rate would only be .517% (12.9B -12.7B = .2B / 3 years = .517% / yr.)**

  - Fed reported in 2013 Payments Study:
    - **Annual decline rate of 10.4%**

  - If transit volume in 2015 was 12.9B and 14.1B in 2012:
    - **Annual decline rate would only be 2.84% (14.1B -12.9B = 1.2B / 3 years = 2.836% / yr.)**

Making Sense of Payments Trends

Percentage of Organization's B2B Payments Made by Checks

(Percentage of B2B Payments Made by Organizations)

Data points:
- 2004: 81%
- 2007: 74%
- 2010: 67%
- 2013: 50%
- 2016: 51%
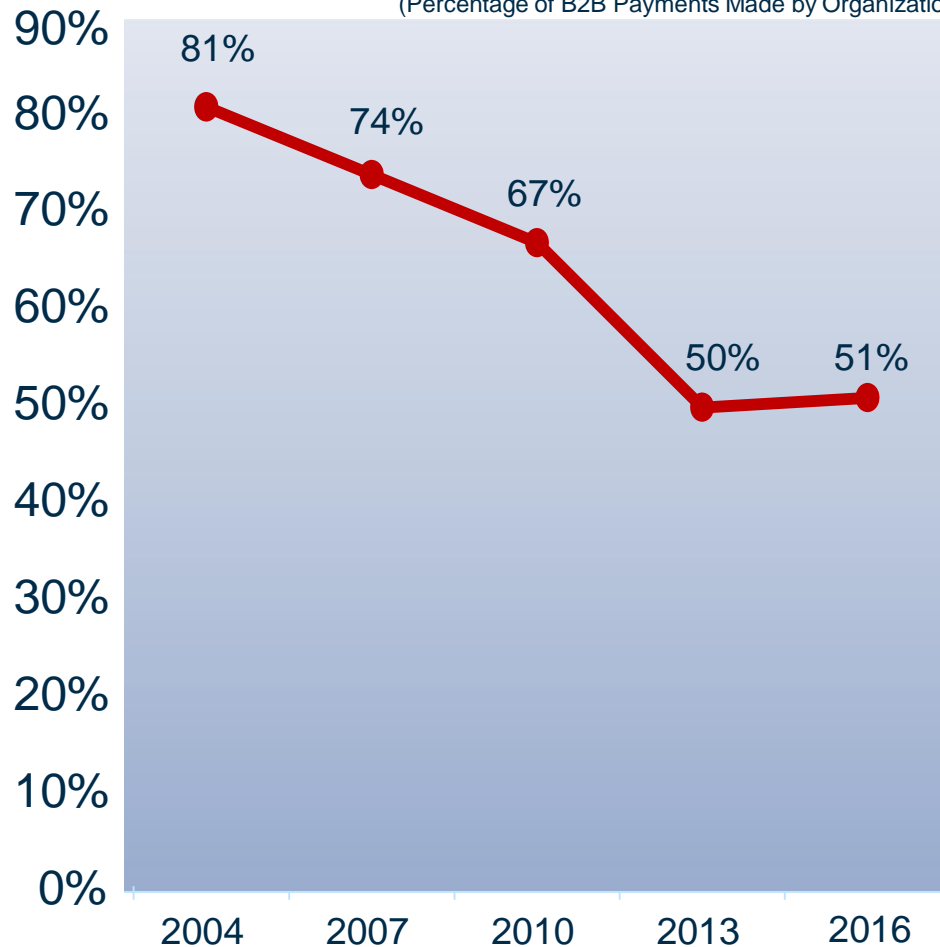
What Has Happened?

- Declining Trend from 2004 is Broken!

- Check Use is Not Declining Anymore!

- What is Behind the Continued Check Use?
  - Barriers
  - Cost of Change
  - Familiarity with Checks

Source: 2016 Electronic Payments, Association for Financial Professionals

OrboGraph

- **Decision Could be Impacted by Changes in Future Payments**
  - How likely is Faster Payments to replace checks for business payments?

Solving Payment Negotiability & Compliance Challenges in the New Era of Branch Transformation and Self Service

Joe Gregory
VP Marketing, Orbograph

2017 ORBOGRAPH CLIENT CONFERENCE
DELIVERING THE FUTURE IN HEALTHCARE, CHECK AND PAYMENTS

Targets for Improvements

Fraud
EMV impact, On-us vs. Deposit losses

AML/BSA
Transaction Monitoring
KYC

Operational
New manual processes

Risk & Loss Tolerance

Compliance
OFAC (Int'l)
UDAAP

Regulation
Reg CC, UCC

IT
Real-time, Cloud, Silos, Marketing, Receivables

TELLER IMAGE CAPTURE   CENTRALIZED/INCLEARINGS   POINT OF SALE   REMITTANCE PROCESSING   BRANCH IMAGE CAPTURE

Address specific challenges, risks and problems generated from each Omnichannel workflow

CONCIERGE TABLET   REMOTE DEPOSIT CAPTURE   MOBILE RDC   VIDEO ATM   SELF SERVICE KIOSK

Now Specific Field Interests

Check Number
Positive Pay, Fraud Detection, Image Integrity

Payor Name/Address
Free read OCR, Watch Lists, Marketing

Date
Negotiability, Positive Pay, Fraud Detection

Payee
Marketing, Remittance Posting, Positive Pay, Fraud Detection, Marketing

Courtesy Amount
POD, Amount Verification, Positive Pay, Fraud Detection, Image Integrity

Memo Line
Remittance, AP Posting

Legal Amount
POD, Amount Verification, Positive Payee, Fraud Detection, Image Integrity,
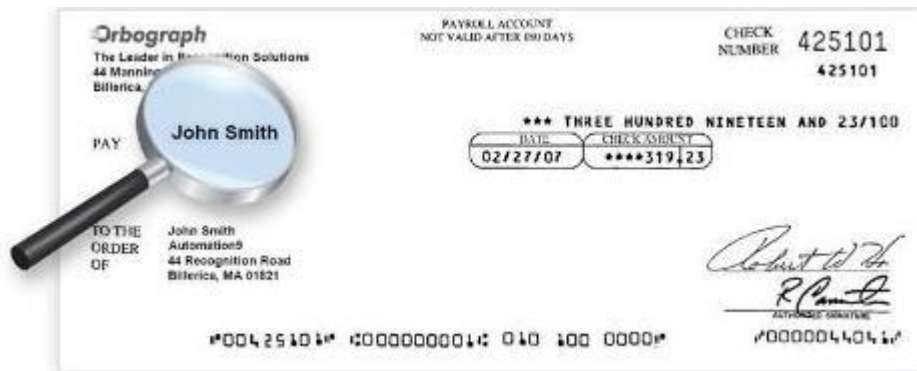
Check Stock Validation
Negotiability, Fraud Detection

MICR Line
Posting, Image Integrity

Signature
Negotiability, Fraud Detection

Market Needs Have Evolved

- From centralized to omnichannel
  - Completely unmonitored transaction input into the check clearing system
    - No validation vs. manual vs. sampling
- Cloud and/or virtualized servers
- Check's fraud exposure increased with EMV
  - Counterfeiters are back…
- Rules and regulations from REG CC/UCC
- Banks tightened up their deposit agreements
  - How to control/monitor?

OrboGraph

5. Eligible Items and Security Interest. You agree to scan and deposit only checks as the term check is defined in Federal Reserve Regulation CC ("Reg. CC"). You agree that the Image of the check that is transmitted to the Bank shall be deemed an "item" within the meaning of Articles 3 and 4 of the Uniform Commercial Code (1990 Official Text).

You agree that you will not use this Service to scan and deposit any of the following checks ("Prohibited Check"), which shall be considered prohibited notwithstanding that such checks may constitute "checks" under Reg. CC:

- Checks payable to any person or entity other than the owner(s) of the account into which the check is being deposited.
- Checks containing an alteration to any of the fields on the front of the check, or which you know or suspect, or should know otherwise not authorized by the owner of the account on which the check is drawn
- Checks payable to two or more persons jointly, not alternatively, unless deposited into an account jointly own
- Checks previously converted to a substitute check as defined in the Account Agreements, are "imag substitute checks.
- Checks drawn on a financial institution located outside the United States.
- Checks that are remotely created checks, as defined in the Account Agreement.
- Checks not payable in United States currency.
- Checks dated more than six (6) months prior to the date of deposit.
- Checks prohibited by the Bank's current procedures related to this Service or which are governing your Bank account.
- Checks payable on sight or payable through Drafts.
- Checks with any endorsement on the back other than that specified in this Agreement.
- Checks that have previously been negotiated, submitted through this Service, or through a remo institution.
- Checks that are drawn or otherwise issued by the U. S. Treasury Department.
- Money Orders or Postal Money Orders.
- Travelers Checks.

You agree that we may, in our sole discretion, amend the list of Prohibited Checks from time to time. If you deposit a Prohibited Check, you agree to indemnify and reimburse the Bank for, and hold the Bank harmless from and against, any and all losses, costs and expenses (including reasonable attorneys' fees) the Bank may incur associated with any warranty, indemnity or other claim related thereto.

5. **Types of Checks.** You may deposit checks using Mobile Deposit Capture, however, there are some checks that you cannot deposit. These include:

- Checks payable to any person or entity other than you.
- Checks containing any alteration of which you know or believe to be fraudulent or not authorized by the owner or the account on which the check is drawn.
- Any checks that are not in original form with a signature, such as substitute checks or remotely created checks, as defined in Reg. CC.
- Traveler's cheques or money orders.
- Returned checks.
- Postdated checks or stale dated checks (more than 6 months old).
- Checks written off an account at a financial institution located outside the United States.
- Checks not payable in United States currency.

Note that any check that you attempt to deposit using Mobile Deposit Capture is subject to verification by Bank of the West. We may reject an item for deposit for any reason and will not be liable to you. In such case, you will need to deposit the item by other means, such as visiting a Bank of the West location. any other financial

Ensure Payment Negotiability

- Validate every check (on-us and transit)
- Optimized by risk factors
  - Channel
  - Source
  - Document

13 Ways to Improve Your Consumer & Corporate Deposit Channels

- Real-time any workflow
- Automate & make immediate risk decisions
  - Factoring in problematic areas:
    - ATMs in suspect areas
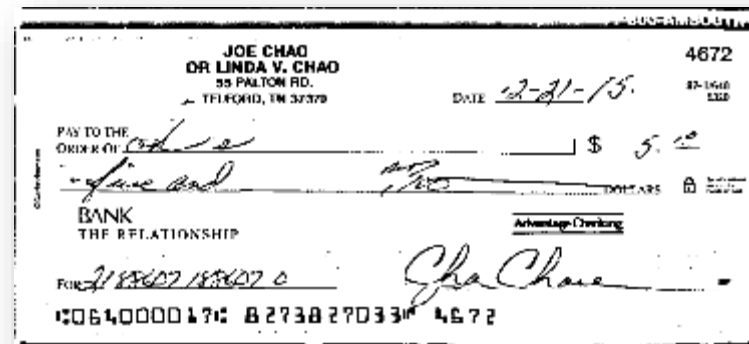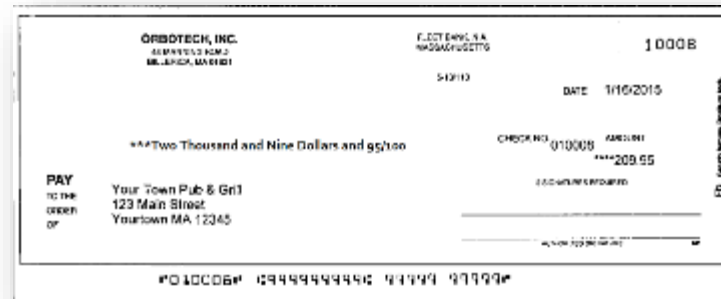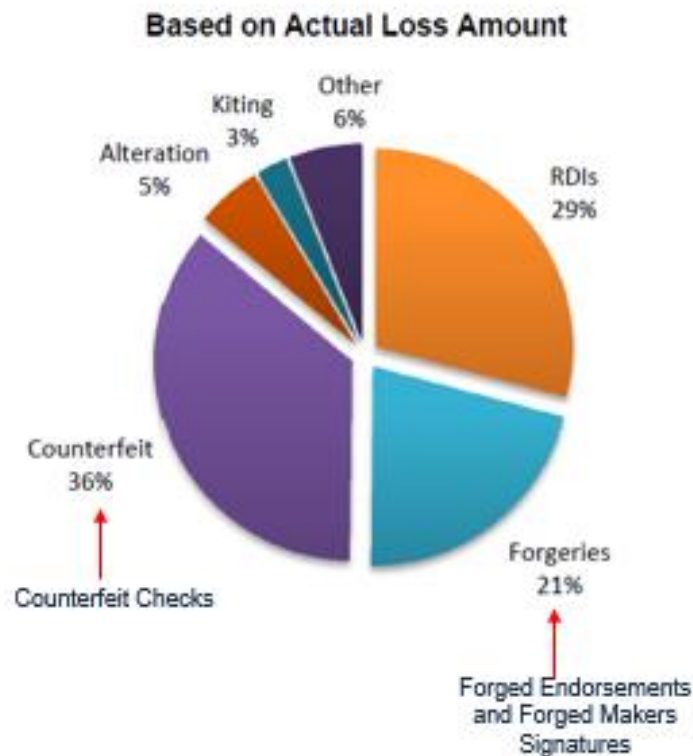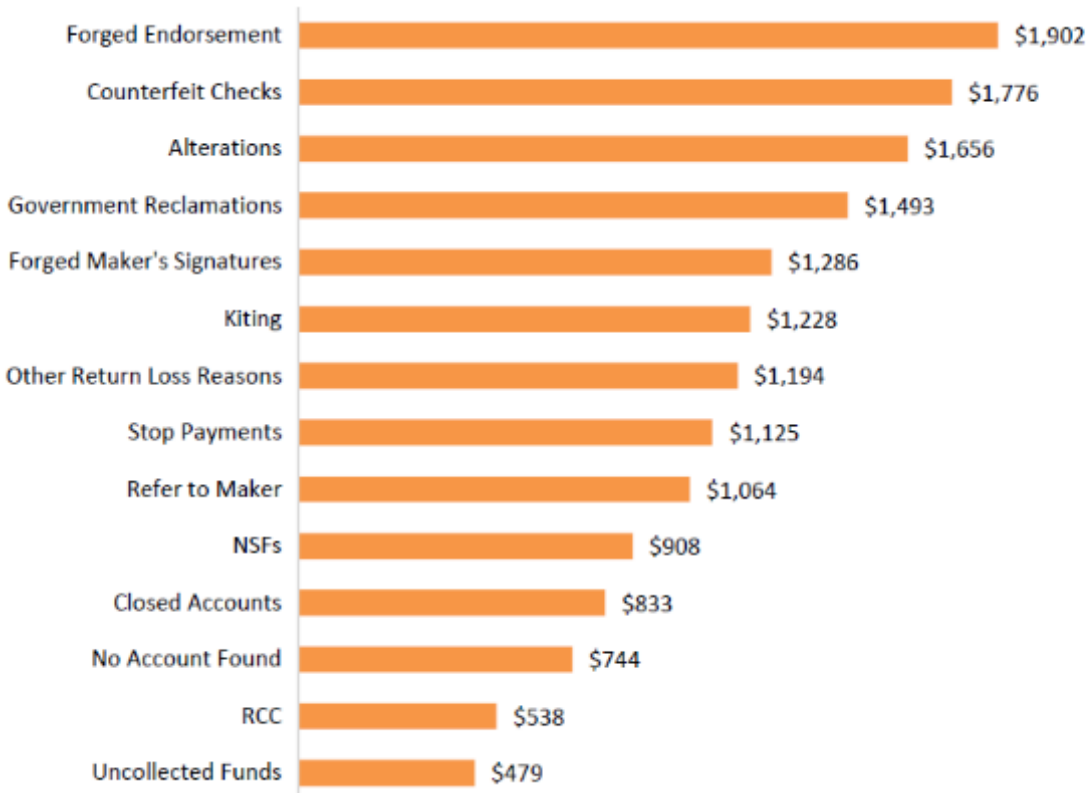   - Account types
  - Doubtful collectability

OrboGraph

Payee Matching

Reduce operational errors, catch customer errors, validate negotiable item (personal and business)

- Wholesale lockbox
- ATM deposits
- Vault processing
- Retail lockbox
- Mobile RDC
- Other

Check Fraud Loss by Type

Type	Amount
Forged Endorsement	$1,902
Counterfeit Checks	$1,776
Alterations	$1,656
Government Reclamations	$1,493
Forged Maker's Signatures	$1,286
Kiting	$1,228
Other Return Loss Reasons	$1,194
Stop Payments	$1,125
Refer to Maker	$1,064
NSFs	$908
Closed Accounts	$833
No Account Found	$744
RCC	$538
Uncollected Funds	$479

Based on Actual Loss Amount

- Other 6%
- Kiting 3%
- Alteration 5%
- RDIs 29%
- Counterfeit 36% (Counterfeit Checks)
- Forgeries 21% (Forged Endorsements and Forged Makers Signatures)

My ON-US fraud would be your Deposit fraud

One System Detection

Fraud Detection

Image Analysis

- Automated Signature Verification
- Check Stock Validation
- Check Style Analysis
- CAR/LAR Matching
- PAD/RCC Detection
- Payee Matching / PNV*

Transaction Analysis

- Serial Out of Range
- Amount Out of Range
- New Account
- Watch List (Account Level)

Deposit Review Functions

Image Review

- Missing Signature Detection
- Dual Signature Detection
- Image Quality/Usability/Integrity
- Endorsement Analysis*
- Amount Verification

Transaction Monitoring

- High Dollar Review
- Duplicate Detection
- Closed Account
- Inactive Account
- Dormant Account

Image Analysis Features

- ## PAD (RCC) detection
  - Read printed typical text in the signature area

- ## Payee matching
  - Good payees, and bad payees

- ## Missing Signature test
  - Assuming the signature verification failed

- ## Dual signatures test
  - Conditional by amount threshold

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Data Extraction for Compliance

- Complete data extraction process of information from check images

- Reformat file format for uploading into OFAC and other AML Systems

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OFAC Screening, AML/BSA

- Requirements for US check payments
  - International exchange
  - High dollar
  - Specific items
  - Fuzzy logic matching
- OFAC SDN (Specifically Designated Nationals), sanction lists or country list
- Bank & vendor feedback
- MSB

- Funds Availability vs. Hold timeframes determined by
  - Type of Check i.e. business , personal official government
  - Known of Unknown customer
  - Age of account **(New Account)**
  - Endorsed or not
  - On-Us or Transit Check **(Deposit Profiling)**
- ECCHO Rule 8

Board of Governors of the Federal Reserve System

The Federal Reserve, the central bank of the United States, provides the nation with a safe, flexible, and stable monetary and financial system.

OrboGraph

UDAAP

Dodd-Frank defines an unfair practice as one that harms consumers financially and that consumers cannot reasonably avoid. The harm does not have to involve a large amount of money; the law applies even to a small amount of monetary damage that many consumers experience.

- Encoding error on consumers account

- Failing to post payments timely or properly or to credit a consumer's account with payments that the consumer submitted on time and then charging late fees to that consumer.

- Amount Verification protection/impact

```
CP890AVM

ALL SOURCES
AV GRAND TOTALS FOR NOVEMBER  2013
******************************************
** CYCLE DATE  : 11/13/2013
** AV TOTAL    :       8,431,632
** AV SUSPECT  :          41,699
** AV CHANGED  :             975
** DIFF#2 VOL  :           1,821
** AV SUS RATE :           0.49%
** AV CHG RATE :           2.34%
** DIFF#2 RATE :           4.37%
** NET CLIENT DIFF:  $1,614,732.38-
** AV CHANGED/MM: 115.63/MM
******************************************
```

OrboGraph

OrboAnywhere
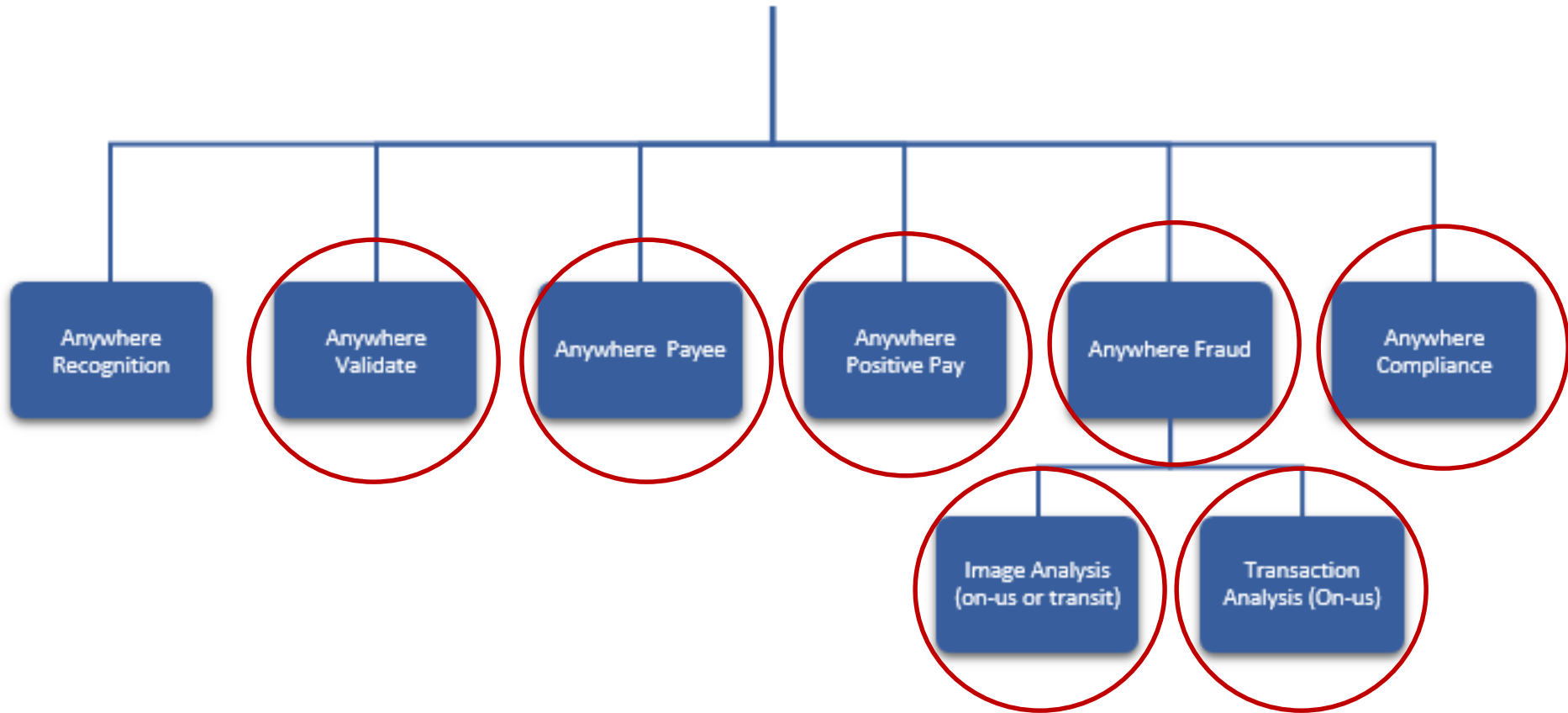
Delivering the Future of Paper Conversion and Electronification for Any Workflow

Robert Bowman, CAQH
CORE Associate Director

CAQH Overview

National Business Rules

CAQH CORE

Convenes industry stakeholders to establish best practices by developing and implementing national business rules that maximize efficiency and savings.

CAQH Solutions

Collaborates with industry stakeholders to develop shared utilities that streamline the collection, management, and use of critical provider and member data.

CAQH

Shared Utilities

Industry Research

CAQH Explorations

Collects and analyzes industry data to establish benchmarks as a *catalyst* for further progress.

Trends show steady, but modest progress in adoption of fully electronic transactions, with promising accelerated growth for some transactions.

FIGURE 1:
Adoption of Fully Electronic Administrative Transactions for Commercial Medical and Dental Health Plans, 2014 – 2015

MEDICAL
- Claim Submission: 93%, 94%
- Eligibility & Benefit Verification: 71%, 76%
- Claim Status Inquiries: 57%, 63%
- Claim Payment: 61%, 62%
- COB Claims: 49%, 56%
- Remittance Advice: 51%, 55%
- Prior Authorization: 10%, 18%
- Referral Requests: 6%, 7%

DENTAL
- Claim Submission: 70%, 74%
- Eligibility & Benefit Verification: 56%, 58%
- Claim Status Inquiries: 27%, 28%
- Claim Payment: 6%, 8%

Legend: 2014, 2015
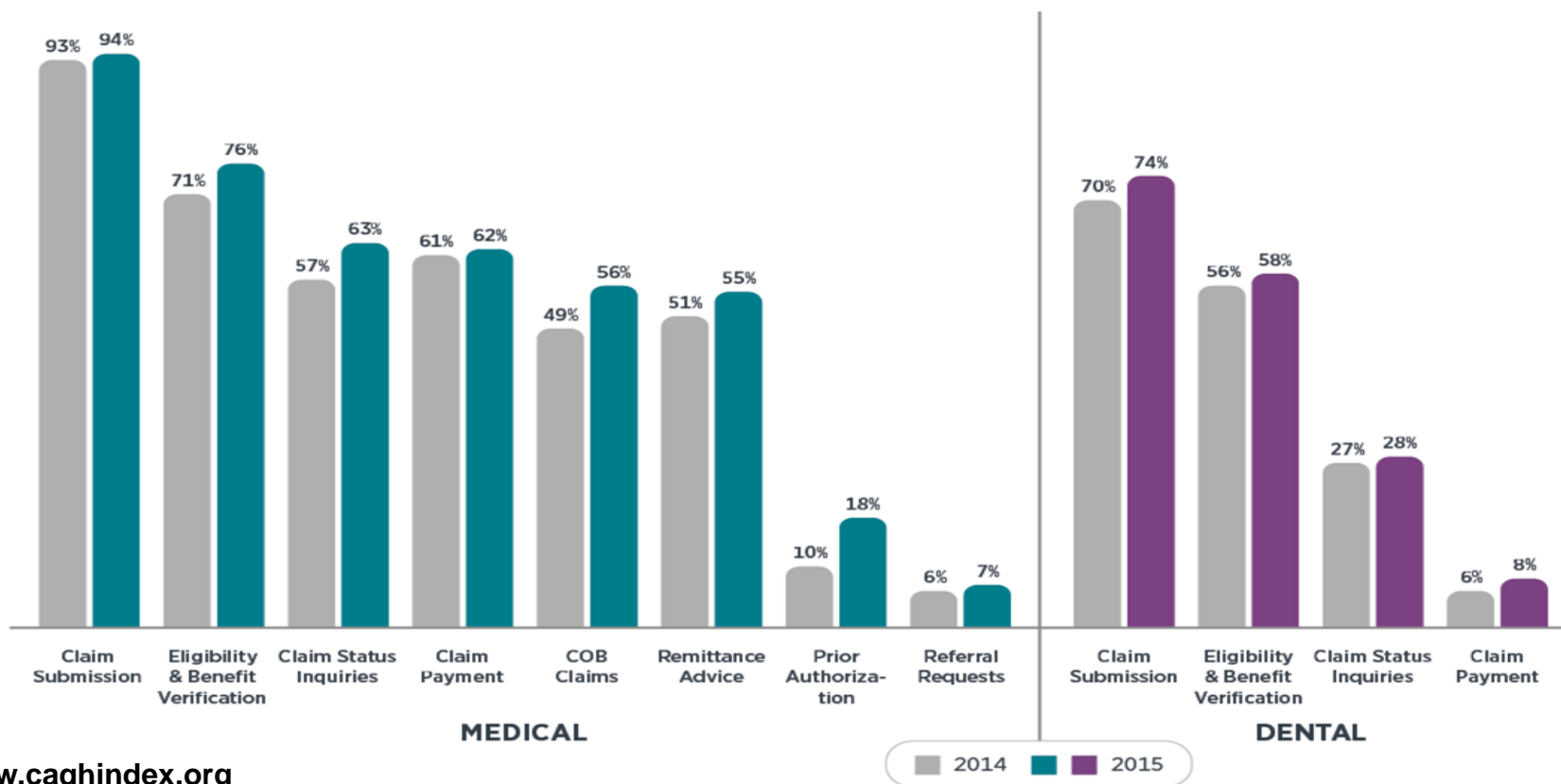
www.caqhindex.org

KEY BENEFITS

- **Standardized electronic enrollment for EFT/ERA**: Providers will be able to enroll in both EFT and ERA electronically with all health plans using a consistent set of data elements.
- **Potential reduction in manual claim rework**: With health plans more consistently using denial and adjustments codes per the CORE-defined Business Scenarios, providers will have less rework.
- **Reduction in A/R days:** Automated and timely re-association of EFT and ERA leading to efficiencies and reduced errors for payment posting.

SAVINGS ESTIMATE

- Between $300 million and $3.3 billion over 10 years* for providers, including hospitals and health systems, and health plans.

Timeframe

- The EFT Standard and EFT & ERA Operating Rules are required to be in use since January 2014.
- Hospitals and Health Systems have been working with their trading partners to achieve these benefits.

* Administrative Simplification: Adoption of Operating Rules for Eligibility for a Health Plan and Health Care Claim Status Transactions

CORE Certifications Awarded by Stakeholder Type

Health Plans	Gold Coast Health Plan	SAN FRANCISCO HEALTH PLAN — Here for you	UPMC HEALTH PLAN	HealthPlan OF SAN MATEO	OMES — OFFICE OF MANAGEMENT & ENTERPRISE SERVICES / KAISER PERMANENTE
Providers	Department of Veterans Affairs	MAYO CLINIC	MONTEFIORE Medical Center	WAKE FOREST UNIVERSITY HEALTH SCIENCES	SUMMIT GROUP MEDICAL / SPECTRUM LABORATORY NETWORK
Clearinghouses	TriZetto Provider Solutions	PostnTrack	SSI	OPTUM	CHANGE HEALTHCARE / InstaMed — Healthcare Payments Simplified
Vendor Solutions	OrboGraph — Intelligent Payment Automation	NEXTGEN HEALTHCARE	GE Healthcare	PNC HEALTHCARE	athenahealth / RelayHealth

CAQH 2016 Index
Adoption and Cost of Electronic Claim Attachments

Transaction Costs to Providers

Transaction	Method	Provider Cost	Provider Savings Opportunity
Claim Submission/ Receipt	Manual	$2.02	$1.43
	Electronic	$0.59	
Eligibility and Benefit Verification	Manual	$4.02	$3.60
	Electronic	$0.42	
Prior Authorization	Manual	$7.50	$5.61
	Electronic	$1.89	
Claim Status Inquiry	Manual	$5.40	$3.59
	Electronic	$1.81	
Claim Payment	Manual	$2.89	$2.20
	Electronic	$0.69	
Claim Remittance Advice	Manual	$5.69	$4.74
	Electronic	$0.95	
Claim Attachments	Manual	$5.25	$4.08
	Electronic	$1.17	

Transaction Costs to Health Plans

Transaction	Method	Health Plan Cost	Health Plan Savings Opportunity
Claim Submission/ Receipt	Manual	$0.62	$0.52
	Electronic	$0.09	
Eligibility and Benefit Verification	Manual	$4.36	$4.29
	Electronic	$0.07	
Prior Authorization	Manual	$3.68	$3.64
	Electronic	$0.04	
Claim Status Inquiry	Manual	$4.39	$4.35
	Electronic	$0.04	
Claim Payment	Manual	$0.57	$0.48
	Electronic	$0.09	
Claim Remittance Advice	Manual	$0.50	$0.45
	Electronic	$0.05	
Claim Attachments	Manual	$1.74	$1.64
	Electronic	$0.10	

CAQH CORE Activities on Attachments
Attachments Migration Path will be Key

- Ultimate goal is to reduce the paper burden and automate functions with structured data, while:
  - Accommodating the ability to more automatically review narrative documents, and
  - Ensuring a smooth transition.
- Key considerations include:
  - Where to begin?
  - How quickly to move?
  - How to accommodate innovation?

Stage 1:

Paper

Stage 2:

Electronic Transmission of Paper

Stage 3:

Electronic Exchange of Structured Data
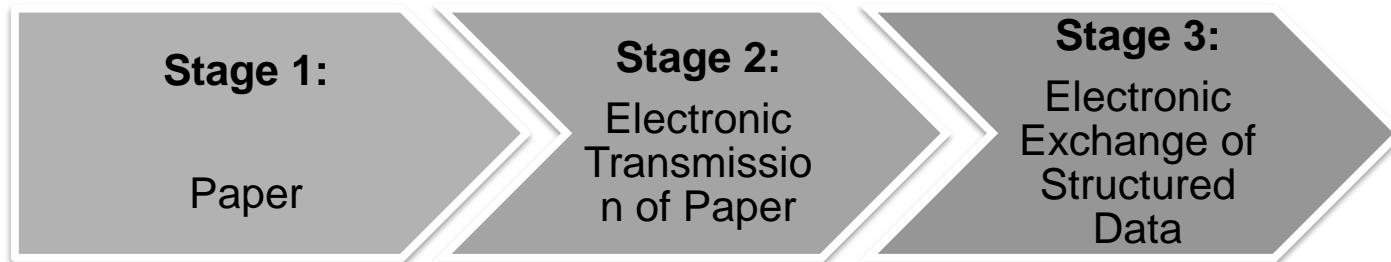
OrboGraph

Healthcare Breakout Session

Delivering the Future of Paper Conversion and Electronification

Avikam Baltsan – Co-President - OrboGraph

Roni Boker – Director Product Management HPAC

Phil Hetrick – HPAC Product Specialist

Bryan Bruton – Technology Business Executive

Conversion Services: EOB to 835

Conversion Services: EOB Indexing

- Our newest conversion service
- "Light" data-lifting
  - Payment Information:
    - Payer
    - Payment Classification Type
      - Check + EOB
      - ACH + EOB
      - VCP + EOB
      - $0 EOB
      - Orphan Check
  - Claim Information
    - Claim ID, Patient Name, DOS, Billed Amount
- Perfect for bank/lockbox archival and retrieval
  - Down to individual page level for claims

OrboGraph

ERA to EFT Reassociation: The Challenge

Receivables Report

Bank Statement

Commonly reassociated using endless Excel Spreadsheets – error prone

Interactive EOB – Who/What/Why?

- Research is the # 1 usage of the HPAC Portal
- Today's 'Virtual EOR'
  – 837/835 Data Research by claim
  – Stagnant view
  – Limited ability to link to other elements

Executive Dashboard – Who/What/Why?

- Intended for C-Level Portal Users
  - OrboGraph reseller
  - Provider
- Utilize embedded BI
- Configurable KPI view
- Basic drill-down
- Allow for quick assessment:
  - Volumes
  - Payments
  - Denials

OrboGraph

Mike Barnes, Vice President of Operations

2017 ORBOGRAPH CLIENT CONFERENCE
DELIVERING THE FUTURE IN HEALTHCARE, CHECK AND PAYMENTS

Orbograph
2017 Client Conference

3.2017

athenahealth
we connect care™

10K
unique bank accounts

2012
Orbograph engaged

99.995%
Accuracy

1.6M
Checks deposited per month

102
Department FTE

Current Workflows

▶ **Remittance Workflows**

Sorting/Slicing → Extraction → Scanning → Dashboard → Exceptions
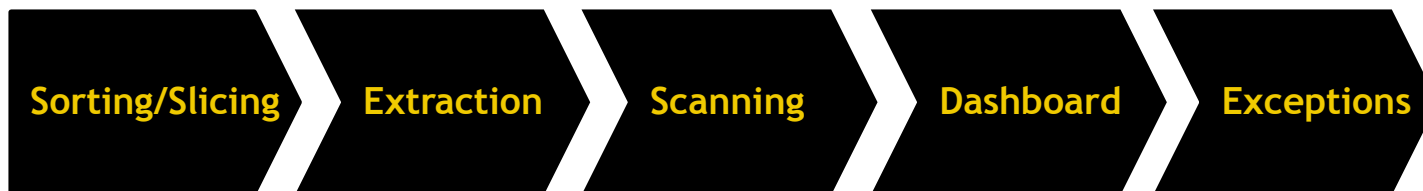
Orbograph

Always returns:

Amount with confidence level

MICR read with confidence level

Sometimes Returns:

Payee name with confidence level

ATHENA (11/07/2016 09:03am ET)
- Set IQUAFLAGS to 6
- Set ORBOCARAMOUNT to 100
- Set ORBOCARAMOUNTCONFIDENCE to 95
- Set ORBOCARMICR to O609647710T071923226T00006436223319O
- Set ORBOCARMICRCONFIDENCE to 75
- Set ORBOCARPAYEECONFIDENCE to 0
- Changed STATUS from SENTTOORBO to ORBOCOMPLETE

Filling in wildcards automatically

Orbograph MICR: T21?070175T1234567?901234
Scanner MICR: T211070175T12*4567890123*

Digital Check Solutions
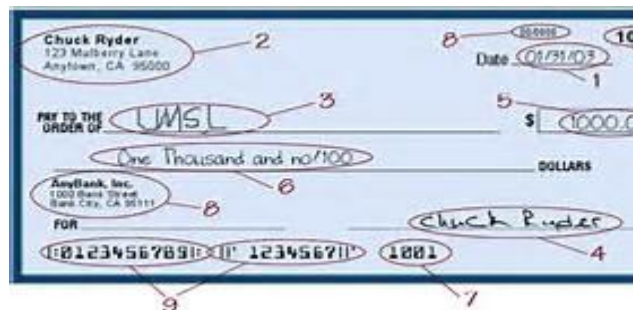
MORE THAN JUST HARDWARE

What do we hear from Customers

- Customers continue to ask for more and more information and data from checks on the capture platforms:
  - Payee
  - Payor
  - Signature
  - Endorsement
  - Other

- Scanner Outlook:
  - Digital Check is under more pressure to continue to enhance and add new features to our check scanner line everyday as technology expands.
  - Branch of the future is evolving which means equipment refresh and new features in the scanner are required.
  - Check volume may be declining but new markets outside of traditional banks are investing in scanner hardware and software beyond the traditional deposit capture.
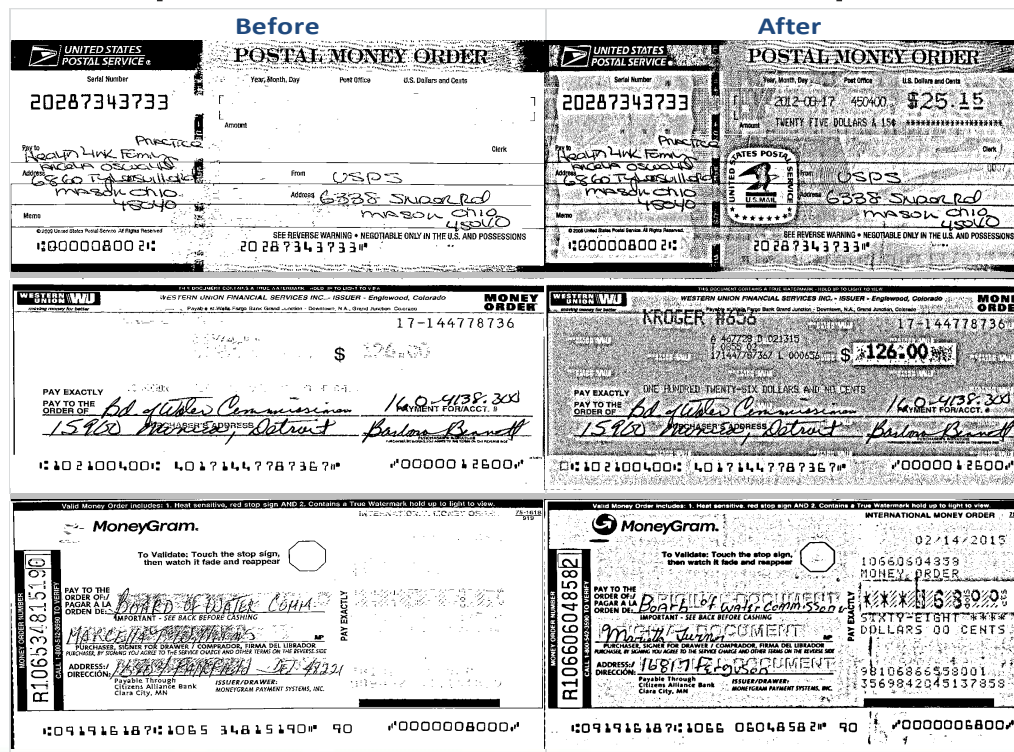
- Clear:
  - Patented zone technology to CLEAN up bad images for better RECO rates on poor images.
  - Stand-alone process or Inline to a capture solution

Vault Capture utilizing Orbograph

- ## Vault by Digital Check
  - Stand-alone vault capture system for commercial check deposits.
  - Integrated solution with Vault management system.
  - Digital Check and Cummins hardware certification.
  - Enhancing the 4 X 4 space.
  - Reco Deposit Tickets big WIN!

Jose Diaz – SVP, Technology and Operations

2017 ORBOGRAPH CLIENT CONFERENCE
DELIVERING THE FUTURE IN HEALTHCARE, CHECK AND PAYMENTS

About FNBLI

- $3.5B Commercial Bank in Glen Head, NY

- 47 Branches serving Nassau and Suffolk Counties of L.I. and Manhattan (2 locations)

- Expansion into Queens (3) and Brooklyn (1) markets

- Strategic focus to organically add new branches to fuel Commercial and Residential lending

OrboGraph

Orbograph Effect on Item Processing

- In House Item Processing on Fiserv Open Solutions OpenCheck system since 2001
- Distributed Capture strategy includes:
  - Back Counter Branch and Dept. Capture
  - Commercial RDC Capture
  - Mobile Capture
  - ATM Capture
- CAR Rates in 2001 - ~ 60%
- Added CAR/LAR in 2004 – Rates ~ 70%
- Upgraded to Accura – Rates ~90% (software only!)
- While the Bank has grown and we've added more distributed channels, IP staff has **DECREASED**

Opportunities & Challenges

- While checks are declining, B2B checks don't appear to be declining at the same rate (Checks aren't going away!)

- FNBLI continues to expand our footprint and delivery channels thus the need for continued straight through processing while keeping headcount low

- We're seeing an increase in check fraud attempts

- One of our target markets (medical) presents an opportunity for us to facilitate their healthcare revenue cycle management

Healthcare Payment Panel

Belinda Collins

BB&T Payment Solutions

Before Healthcare…

- Automation Services LE
  - Branch capture recognition

- Orbograph IQUA
  - Image quality and usability assurance

- Payee Name Verification (PNV) with Desktop Check Analyzer
  - Positive Pay matching for fraud prevention

- Amount Verification
  - Finding errors in inclearings

- Key-Pay
  - Automation addition for work not ready by engine

Orbograph HPAC Solution Value For BB&T

- BB&T has offered wholesale/retail lockbox services for over 35 years in 7 image enabled locations
  - Retail lockbox for patient payments: image and lift data from coupons, with flat file output
  - Prior to engagement with Orbograph, we offered wholesale lockbox for insurance payments, but only the ability to image the EOBs—no data lifting or 835 posting files

- SOLUTION NEED: 400 healthcare lockbox clients—need for data lifting and creating of 835s

- PRIMARY GOAL: <u>Retain</u> the current business, <u>grow</u> the revenue, robust new prospect offering

- VENDOR REQUIREMENTS: Outsource with below requirements:
  - ✓ Ability to integrate with the vendor EASILY with little to no programming expense
  - ✓ Ability to provide a robust state of the art solution
  - ✓ Ability to provide marketing, sales, and client support from the vendor of choice
  - ✓ Ability to provide agile, customizable solution as new client needs are introduced
  - ✓ Ability to integrate paper EOBs and electronic ERAs, compare to claims, and produce 835
  - ✓ Ability to provide a robust vendor supported client portal
  - ✓ Ability to provide solution that meets all our audit, HIPAA and Info Security requirements
  - ✓ Ability for pricing to allow for a good marginal markup and be a key revenue generator
  - ✓ Ability to index correspondence

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OrboGraph

TriZetto Provider Solutions

Kristin Weir, Director Product Management

TPS Partnership with Orbograph

EOB/Payment Scan →

835 ←

Attachments →

TPS SFTP

835
Images

Orbograph

PM/EMR

← Alerts (Doc Wont Process)

← Document Tracking

TPS API

Alerts
Tracking Info
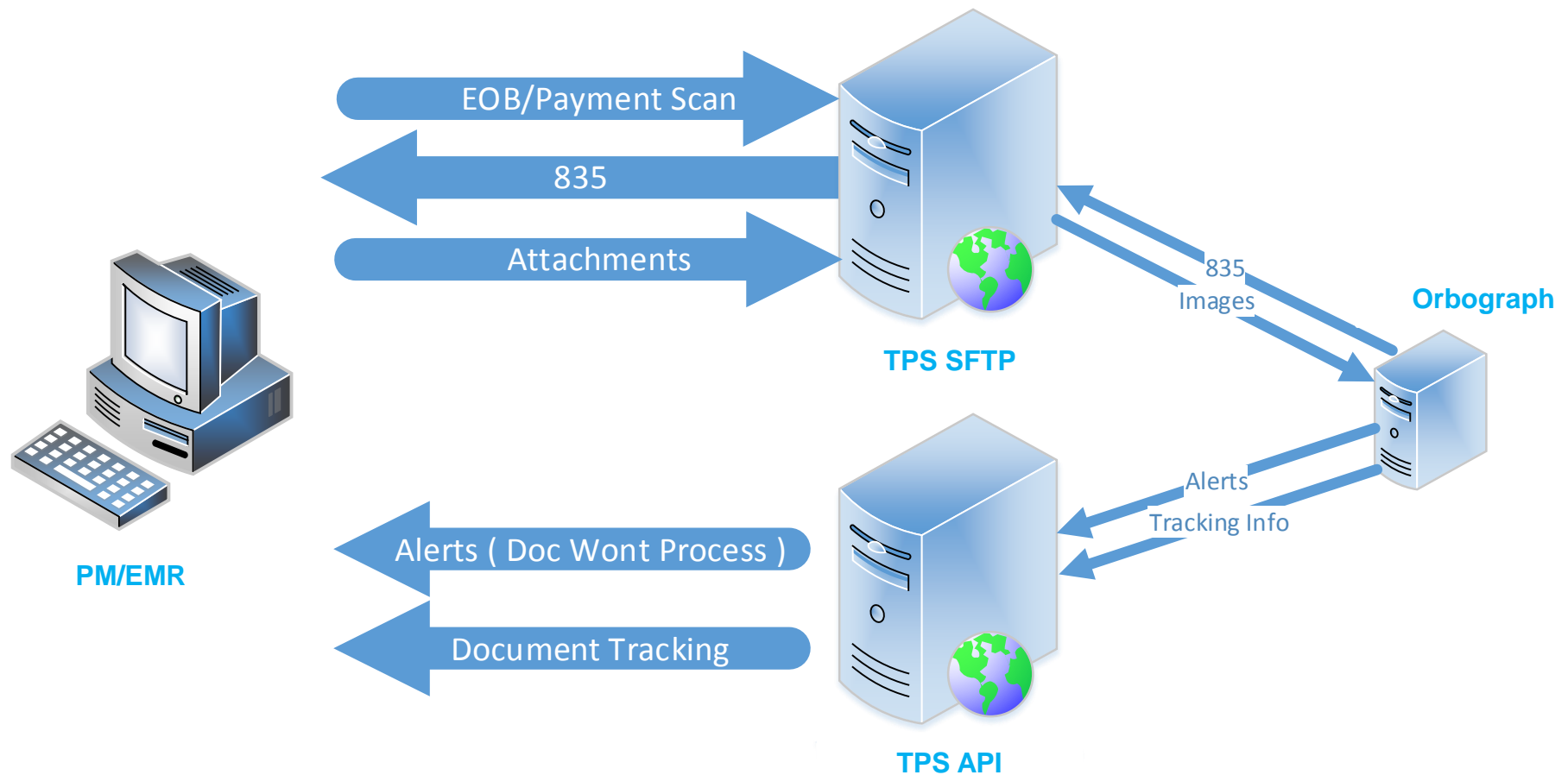
Future Outlook

Integration in PM/EMR

Full analytics = Elimination of paper

"Shift left" = Increase in patient payments

Automation

TRIZETTO
Provider Solutions®
A Cognizant Company

> MORE THAN™ a clearinghouse

Futuristic Achievements SNCH

Healthcare Payment Panel Discussion

SNCH Profile

- 455-bed acute care, Magnet®-recognized not-for-profit teaching hospital
- Approx 20,000 admits and 75,000 ED visits annually
- HIMSS DB: $393M revenues
- 900+ physicians; 3,000+ employees
- Leading Specialties/Expertise
  - Orthopedic & Robotic surgery
  - Cancer & gamma knife surgery
  - Primary Stroke Center
- Others: cardiac, bariatric, sleep medicine, pain management and behavioral

Futuristic Achievements

- Transformation = Electronification
  - EOBs: Improve efficiencies, reduce paper & costs
  - Electronic Content Management (ECM)
  - Improve effectiveness of handling denials
  - Better support electronic payments
  - Reduce receivables (A/R), improve cash flow
- Strategies: systems, technology, workflow, controls
- Solutions: EOB conversion, correspondence automation, re-association

OrboGraph

Futuristic Achievements

- Denials/Letters of approvals/medical records
- Extraction of key indexes
- 3,000 to 4,600 per month
- Manual paper-based workflow
- Coding for medical records
- 3 FTE: reduced to 2
  - Target cost reduction: 50%

Faster: 30 days vs. 1-2 days
Faster A/R recovery
Reduced OT
Reduced leakage
Immediate research
Zero $ EDI 835 for posting
    Posting automation
Faster secondary billing (adjudication)

Futuristic Achievements: TMR

Healthcare Payment Panel Discussion

Healthcare Payment Panel Discussion

- 25+ years helping community banks and their business clients with automated payments processing.

- Banks from $100 million to $20 billion in assets.

- *CITATION* i-*Remit*
  - Fully licensed
  - Fully outsourced
  - Hybrid-remote lockbox capture
    - Bank sites
    - Customer sites

Healthcare Payment Panel Discussion

$3 billion Community Bank has opportunity with 20+ site Womens Medical Group Currently banking with Super Regional… HRA got them in the door…

$2.5 billion Community Bank wins Orthopedic group (15K paper claims per month) generating $3,400 in new revenue per month saving the client labor and locking the relationship into the bank.

$20 billion Bank wins physician group with 17 offices running 15 different Practice Management systems and two different billing companies.

Selling the solution from a Community Bank perspective

Basic Medical Lockbox

- Banks are the traditional lockbox facilitators
  - Secure, scan, basic data entry, balance, deposit, provide image reports

Healthcare Remittance Automation (using HPAC)

- Value added service for our banks
  - Differentiating factor that helps our banks get their feet in the door
  - Makes lockbox a premium service worth hard charging for
  - INCREDIBLE exit barrier

Healthcare Payment Panel Discussion

Selling the solution from a Community Bank perspective

<u>Market Challenges</u>

- Banks Treasury Management teams are overwhelmed by the complexity
  - Nervous bankers are hesitant to sell
- Banks Treasury Management teams are selling to the wrong people
  - Many times they are attempting to sell to the office staff vs the executive team that could see the real value… or they are selling labor reduction vs the overall value
- Healthcare clients need the bank/vendor to help coach them through the entire onboarding process…
  - Not just Converting EOBs to 835

Welcome to The OrbyAwards

Orbograph Hall of Fame

OrbyAwards Process

- 7 Companies and 1 Individual
- Introduction of OrboAward Presenter
- Presenter make the official announcement
- OrbyAward winner visits stage and accepts award
- Pictures are taken
- Short speech is encouraged
- Award winner exits room to red carpet area
- Brief interview/video of OrbyAward acceptance

OrboGraph

OrbyAward Winners

South Nassau Communities Hospitals
2016 Innovation Customer of the Year Award: Healthcare Payments

TriZetto Corporation
2016 Healthcare Business Partner of the Year

BB&T
2016 Healthcare Banking Partner of the Year

Catalyst Corporate Federal Credit Union
2016 New Partner/Client of the Year

SunTrust Bank
2016 Fraud Prevention Customer of the Year

Wausau Financial Systems
2016 Check Processing Innovation Partner of the Year

IBERIABANK
2016 Innovation Customer of the Year: Check Processing

Ron Mills
2017 Hall of Fame Inductee: Development

Dining Event

- Atlanta History Museum
  - 2 busses will pick up @ Westin Buckhead @ 5:45 PM
  - Cocktails and passed apps: 6:00 PM - 7:30 PM
    - Activity: The Selfie Challenge
      - Each Orbograph Member will have a group of 4-5
      - Solve clues and take group selfie with item at museum
      - Team with most correct team selfies win prize
      - More details will be sent in an email
  - Dinner Served @ 7:30-7:45 PM (buffet)
- Check out Orbograph Facebook page for pictures

OrboGraph

The Future is Now:
AWS Cloud Deployment for the Financial and Healthcare Industries

Tara E. Walker

Amazon Web Services

AWS - Every Imaginable Use Case

Over 1 Million Active Customers

800+ Government Agencies

3,000+ Education Institutions

10,000+ Nonprofits

5,000+ System Integrators & Partners

3,000+ Software Vendors
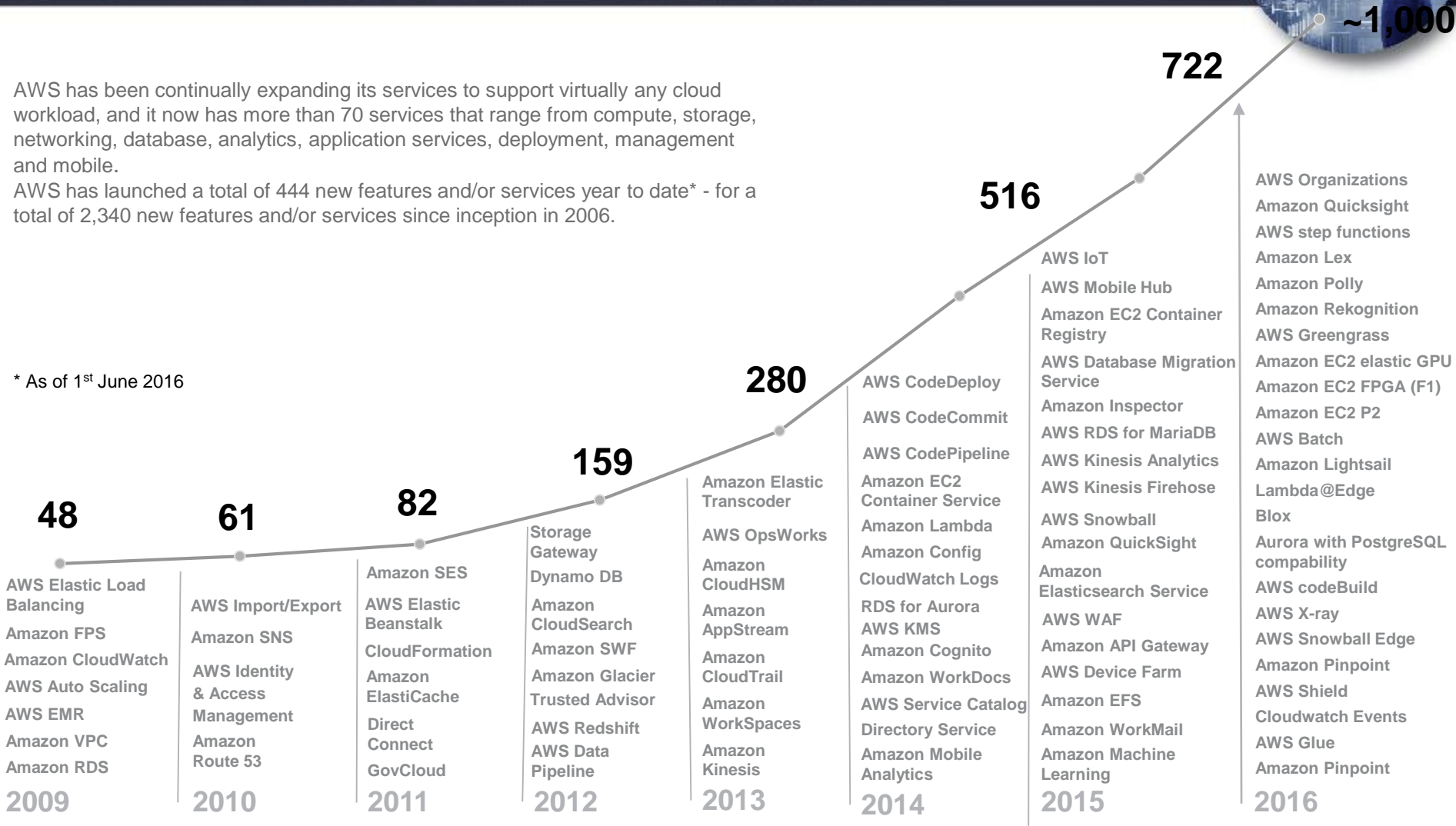
AWS History of Innovation

~1,000

722

AWS has been continually expanding its services to support virtually any cloud workload, and it now has more than 70 services that range from compute, storage, networking, database, analytics, application services, deployment, management and mobile.

AWS has launched a total of 444 new features and/or services year to date* - for a total of 2,340 new features and/or services since inception in 2006.

516

* As of 1st June 2016

280

159

82

48   **61**

2009	2010	2011	2012	2013	2014	2015	2016
AWS Elastic Load Balancing	AWS Import/Export	Amazon SES	Storage Gateway	Amazon Elastic Transcoder	AWS CodeDeploy	AWS IoT	AWS Organizations
Amazon FPS	Amazon SNS	AWS Elastic Beanstalk	Dynamo DB	AWS OpsWorks	AWS CodeCommit	AWS Mobile Hub	Amazon Quicksight
Amazon CloudWatch	AWS Identity & Access Management	CloudFormation	Amazon CloudSearch	Amazon CloudHSM	AWS CodePipeline	Amazon EC2 Container Registry	AWS step functions
AWS Auto Scaling	Amazon Route 53	Amazon ElastiCache	Amazon SWF	Amazon AppStream	Amazon EC2 Container Service	AWS Database Migration Service	Amazon Lex
AWS EMR		Direct Connect	Amazon Glacier	Amazon CloudTrail	Amazon Lambda	Amazon Inspector	Amazon Polly
Amazon VPC		GovCloud	Trusted Advisor	Amazon WorkSpaces	Amazon Config	AWS RDS for MariaDB	Amazon Rekognition
Amazon RDS			AWS Redshift	Amazon Kinesis	CloudWatch Logs	AWS Kinesis Analytics	AWS Greengrass
			AWS Data Pipeline		RDS for Aurora	AWS Kinesis Firehose	Amazon EC2 elastic GPU
					AWS KMS	AWS Snowball	Amazon EC2 FPGA (F1)
					Amazon Cognito	Amazon QuickSight	Amazon EC2 P2
					Amazon WorkDocs	Amazon Elasticsearch Service	AWS Batch
					AWS Service Catalog	AWS WAF	Amazon Lightsail
					Directory Service	Amazon API Gateway	Lambda@Edge
					Amazon Mobile Analytics	AWS Device Farm	Blox
						Amazon EFS	Aurora with PostgreSQL compability
						Amazon WorkMail	AWS codeBuild
						Amazon Machine Learning	AWS X-ray
							AWS Snowball Edge
							Amazon Pinpoint
							AWS Shield
							Cloudwatch Events
							AWS Glue
							Amazon Pinpoint

Execute At Scale

2003

amazon.com

$5.2B retail business

7,800 employees

A whole lot of servers

2012

amazon web services

Every day, AWS adds enough server capacity to power our 2003 $5B enterprise
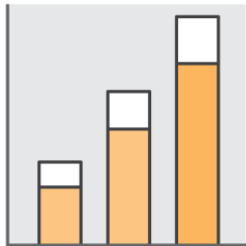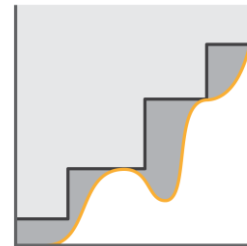
2016

…actually $7B+ every day now

Get rid of time-consuming, expensive tasks

Move from risk-laden up-front expense to flexible variable expense

Stop guessing at capacity planning

Remove complicated infrastructure management that adds little business value

Go global in minutes

OrboGraph

Strengthen your security posture

Over 50 global compliance certifications and accreditations

Security infrastructure built to satisfy military, global banks, and other high-sensitivity organizations

Powerful native functionality and tools at little or no cost

Benefit from AWS industry leading security teams 24/7, 365 days a year

Leverage security enhancements gleaned from 1M+ customer experiences

"Healthcare institutions don't have the time and resources to devote to cybersecurity that an established cloud provider might have."
Lee Kim – Director, Privacy and Security, HIMSS North America

The AWS Cloud

Incorporate new technology into your organization that makes it easier to connect and manage patients.

Manage your data intelligently to better inform decisions affecting care delivery.

Reduce risk by focusing resources dedicated to security, compliance and availability to the most important areas of your business.

"AWS is our trusted partner that is going to run our company for the next 140 years."
Jim Fowler – CIO, General Electric

BAI Webinar Soon

Generational Segments

- ## Millennial
- ## GenX
- ## Boomer

Primary Bank Type

→ Large Bank

→ Regional Bank

→ Community Bank

→ Credit Union

BAI Retail Banking Outlook   -
Online survey to bankers.

> Respondents come from a wide variety of functional areas and institution types and sizes.

BAI Consumer Market Outlook
- Online survey to consumers.

> 2,001 total respondents

Source: BAI Consumer Market Outlook

Delivering Innovations to a Payment Market Paradox: A Mature Market which Changes Quickly and Adopts Technology…

Yaron Katzir, Product Manager, Check Line of Business

Andy Leonhardt, VP Sales

Arik Elimelech, VP R&D

A Product Roadmap Based on Market Data

- Mature/laggard market characteristics
  - Slow to adapt, not purchasing new technology, other…
- "Check" is not your typical mature/laggard marketplace
  - Volume decline is slowing
  - Added-value capabilities will extend life
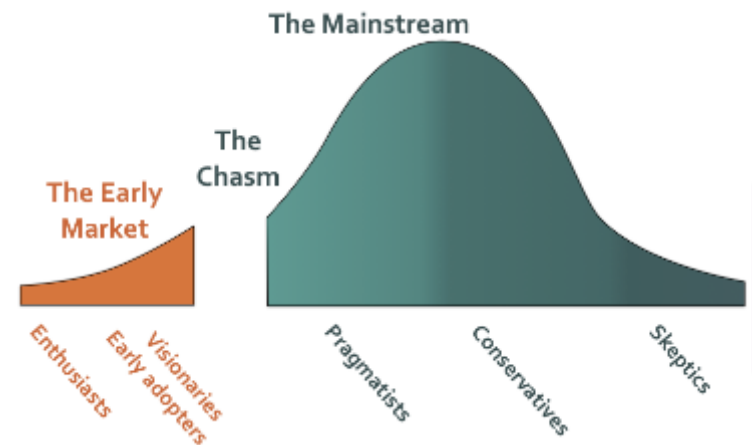
TELLER IMAGE CAPTURE   CENTRALIZED/INCLEARINGS   POINT OF SALE   REMITTANCE PROCESSING   BRANCH IMAGE CAPTURE

Multi-Channel with Real-time Image Validation (for Payment Negotiability)

Address specific challenges, risks and problems generated from each Omnichannel workflow

CONCIERGE TABLET   REMOTE DEPOSIT CAPTURE   MOBILE RDC   VIDEO ATM   SELF SERVICE KIOSK

Many Branch/Teller Capture Clients Are Operating at:

70-80% Read Rate
2-5% Misread Rate

OrboGraph

Branch & Teller Capture Automation

- Business model driven: Up to $1.5M savings/ year per 1M items/day in teller capture

- Client experience improved

- 60% reduction in commercial deposit balancing

- Up to 80% reduction in misreads

Teller/Branch Impact Analysis (Teller Touch Model)

Site Information	Daily Volume	# of Branches	# of Tellers/Branch
Checks Processed Per Day	1,000,000	1,000	Teller

3 Year Savings Estimates

- $520,450 (EST. $ SAVED YEAR 1)
- $1,040,900 (EST. $ SAVED YEAR 1-2)
- $1,561,350 (EST. $ SAVED YEAR 1-3)

Reduction of Teller Touches

- -85.0%
- -51.8%
- -77.8%
- -60.0%

Legend:
- Retail Deposits:'Financial Highlights-Teller Items Keyed
- Retail-Items Requiring Balancing
- Overall Non-Productive Retail Touches
- Commercial Deposits - % Requiring Balancing

OrboGraph

Technology components

Recognition

Validations

Fraud

Web Services

OrboAnywhere

Approaches to risk

---- RDC Channels ---- ---- RDC Channels ----

Remittance
[Payee Matching]

| Manual operation | Doing Nothing | Dollar Limits Holds Legal protection | Manual Operation Quality Control |

Customer satisfaction?
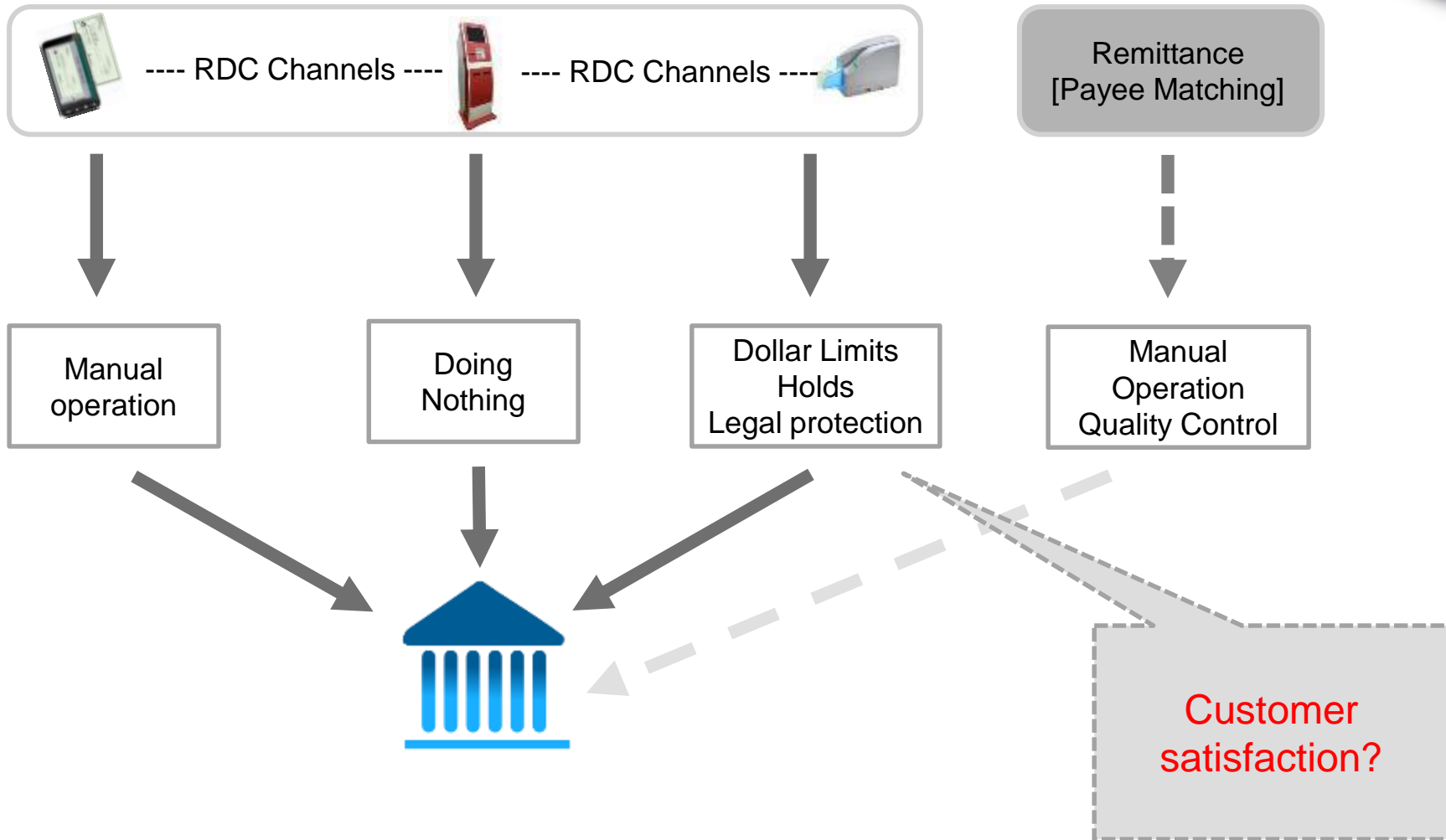
Validations & Fraud Prevention
For Omnichannel

OrboAnywhere Validations

Tellers

Other channels

RISK

ATM

OrboGraph
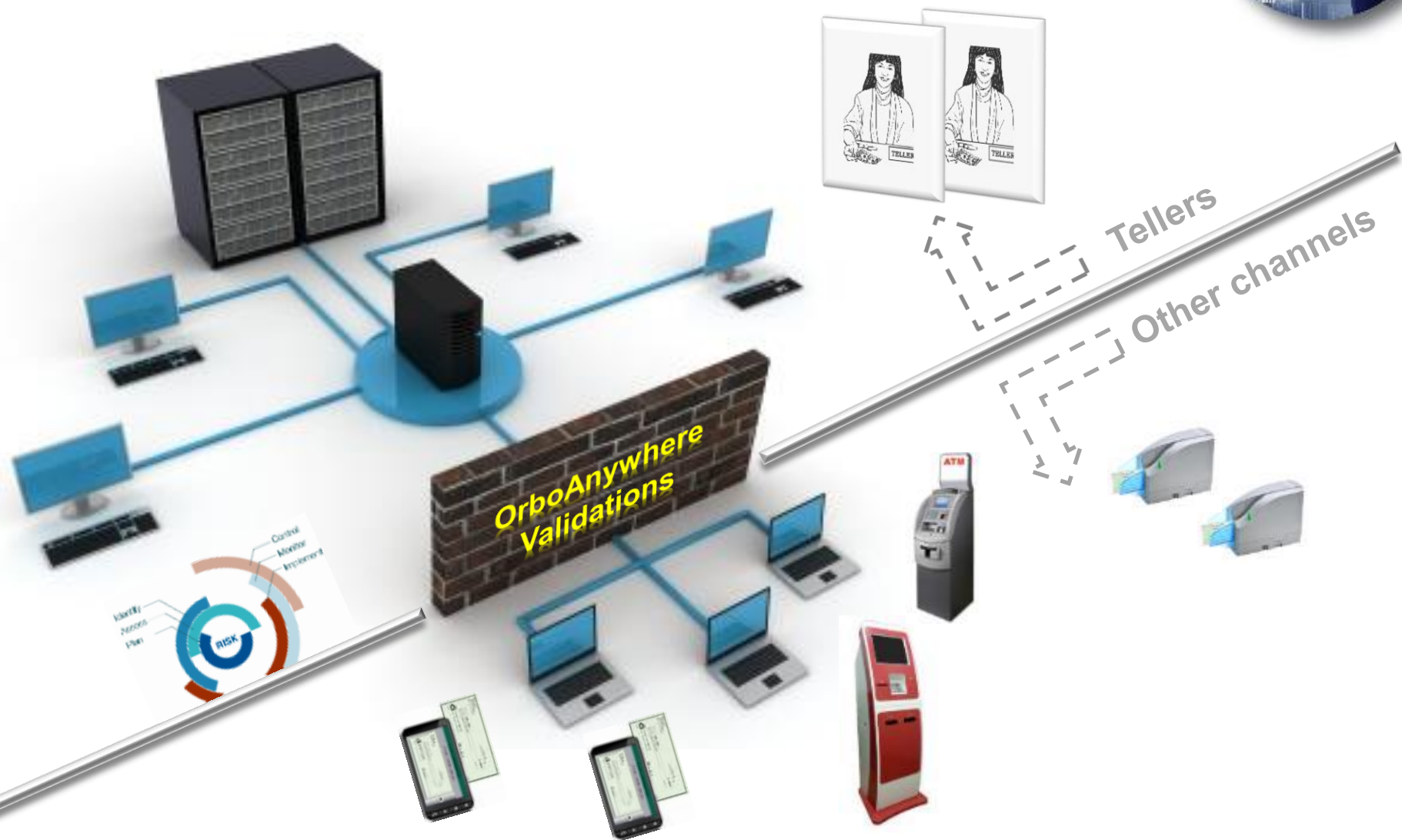
What is…
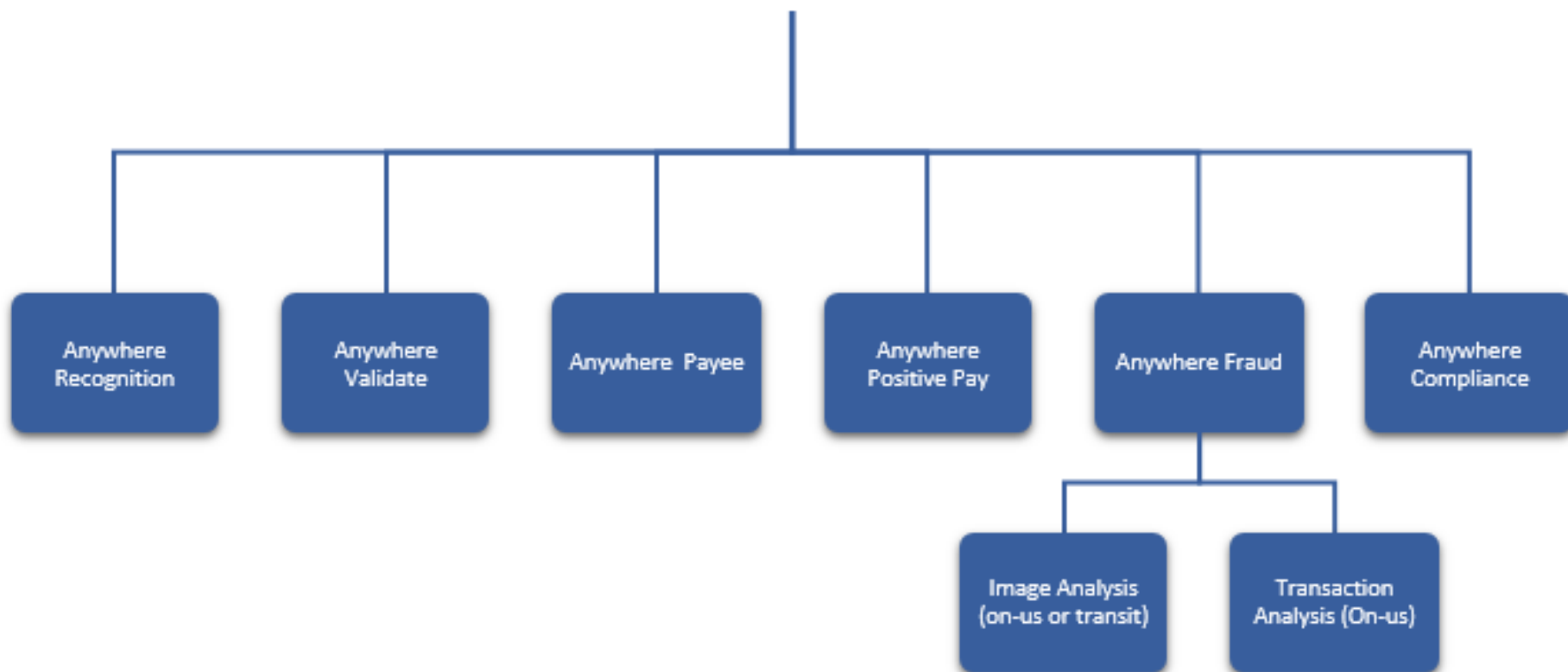
Healthcare Breakout Session

Correspondence Letters & Denied Claims: An Ongoing, Yet Growing Problem

Industry Presentation

Thursday March 23rd 9:30 - 10:45AM

Henri Cattier - CHA

Correspondence Letters & Denied Claims:
An Ongoing, Yet Growing Problem

Henri Cattier, Commonwealth Health Advisors

OrboGraph

Prevention versus Recovery Focus

In 2014 the Advisory Board reported that **90%** of claim denials are avoidable. And that **only about two-thirds of denials are recoverable.** Though prevention is not easy, fixing the root cause of denials has a much larger financial impact than overturning them.

Preventable and Recoverable
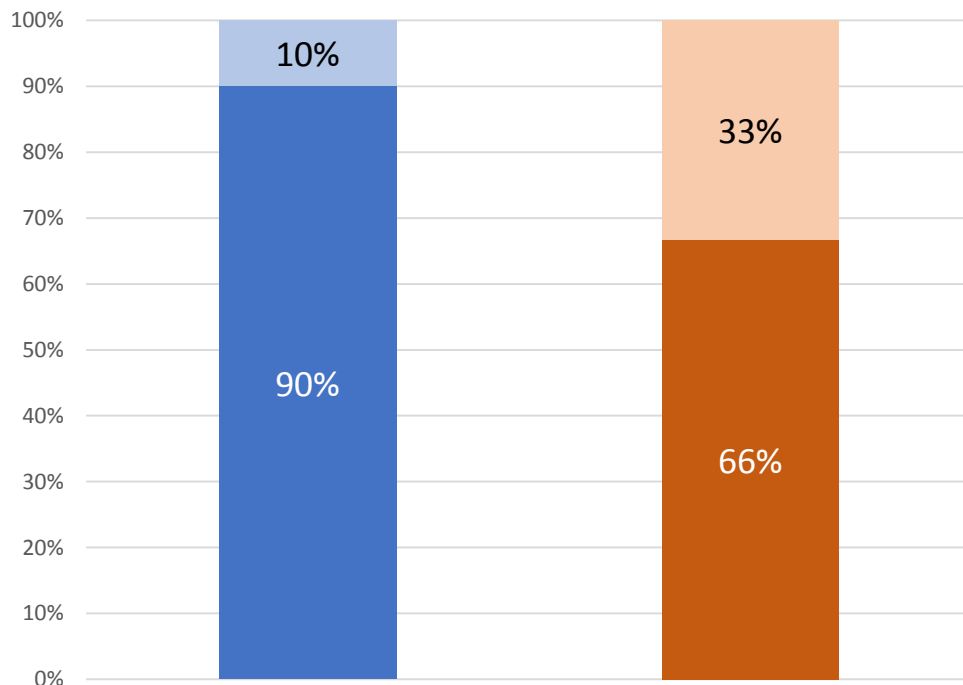
According to the 2013 MGMA health insurer report card, most claims were denied for the following reasons:

- Missing information, such as absent or incorrect patient demographic data and technical errors
- Duplicate claim submission
- Service already adjudicated
- Services not covered by payer
- Time limit for claim submission already passed

The Denial Appeal Process is Costly for Providers

Per the AMAs 2016 Administrative Burden Index, the estimated costs to appeal each denied claim range from **$2 - $4 per claim**.

2016 Medicare – Hospital Costs of Servicing Denial
(June 2016 AHA)

Greater than $400,000

Between $104,001 and $400,000

8%

23%   Less than $40,000

26%

43%

Between $40,001 and $104,000
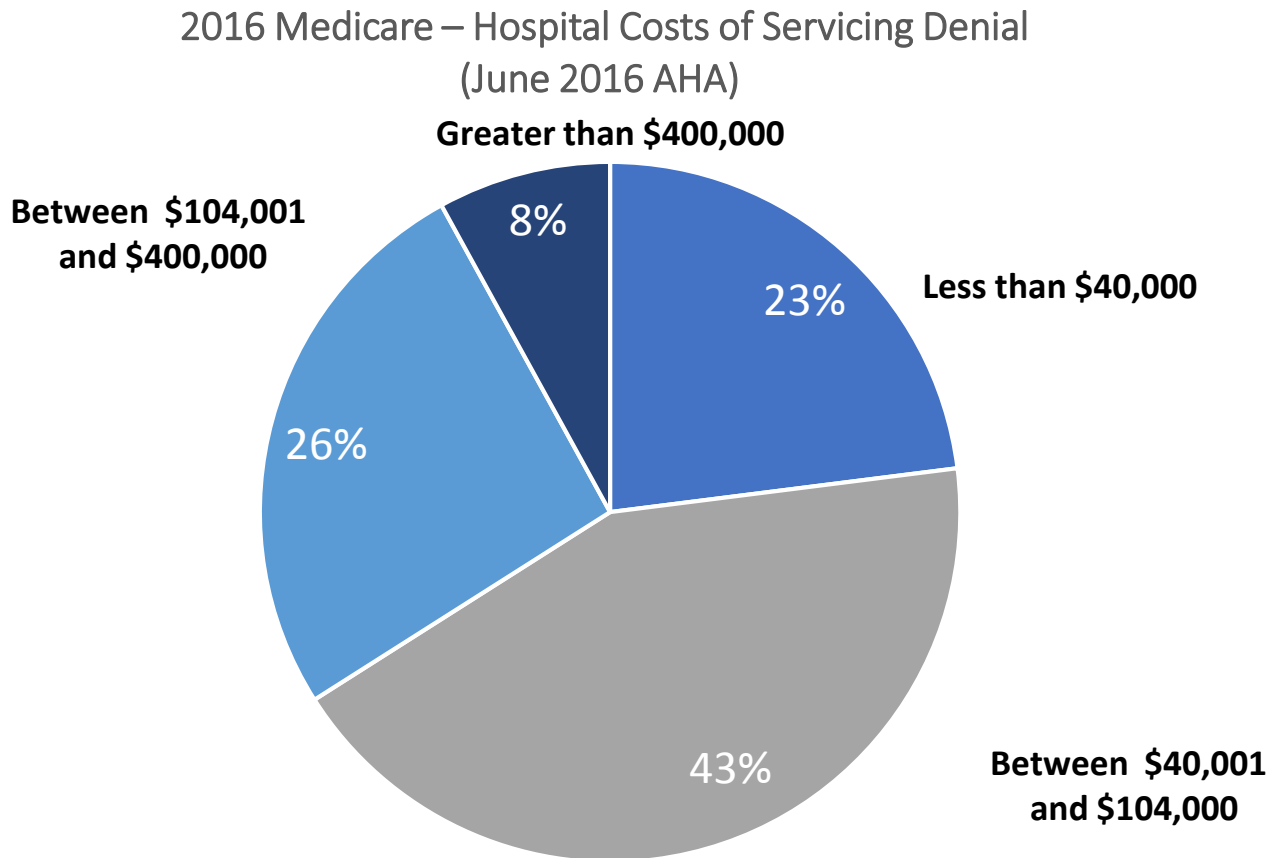
In addition to costs, appeal processes can be time-consuming.

The AHA **reported** in October 2016 that three-quarters of appealed Medicare claims remained at the administrative law judge level for longer than the 90-day statutory limit.

Automation with Correspondence Letters is Lagging, especially with larger providers.

Question: *How satisfied is your hospital with the efficiency of processing paper Correspondence letters from denied claims?*

Legend: No Comment · Very satisfied · Satisfied · Unsatisfied · Very unsatisfied · No comment
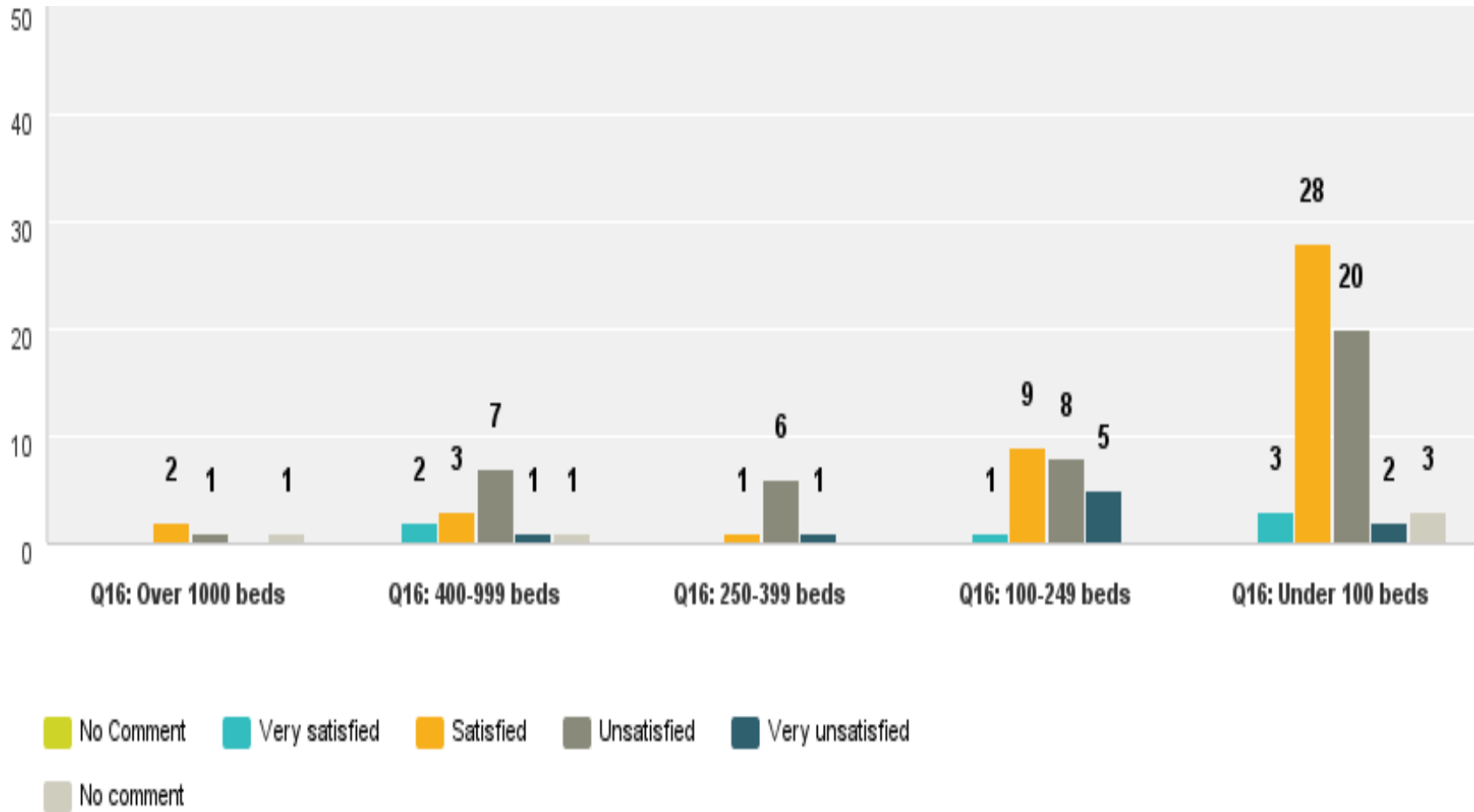
Demand for Solutions for Correspondence & Denials Management

Roughly 50% of hospital executives, across facilities of all sizes, identified an immediate need in their organization for supplemental tools to Analyze Denial Claims and handle Correspondence Letters
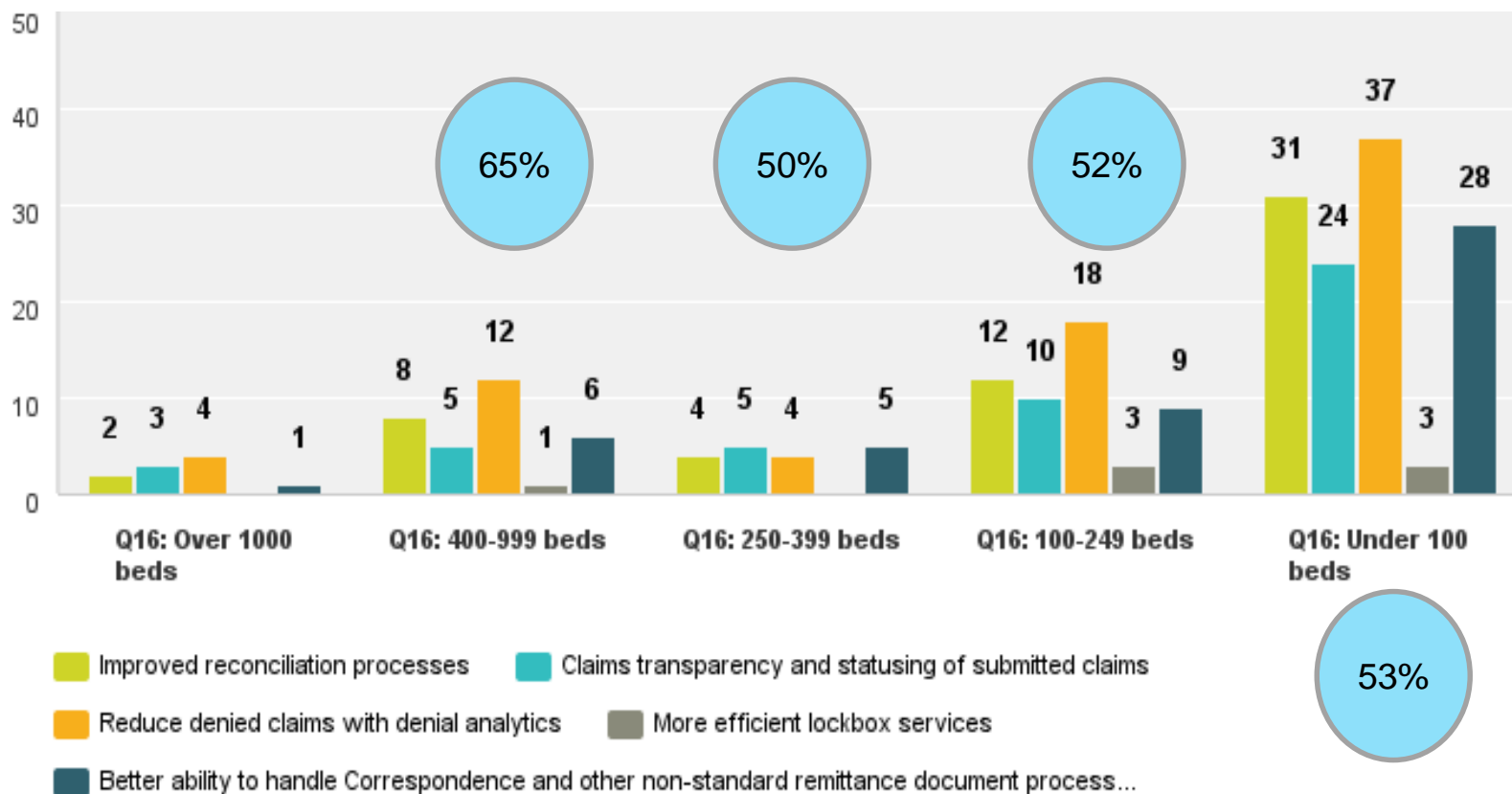
Product Core Functions

```
                    DENIAL
                   ANALYTICS
                       |
          ┌────────────┴────────────┐
     Denial Insight          Denial Process
                                 Support
```
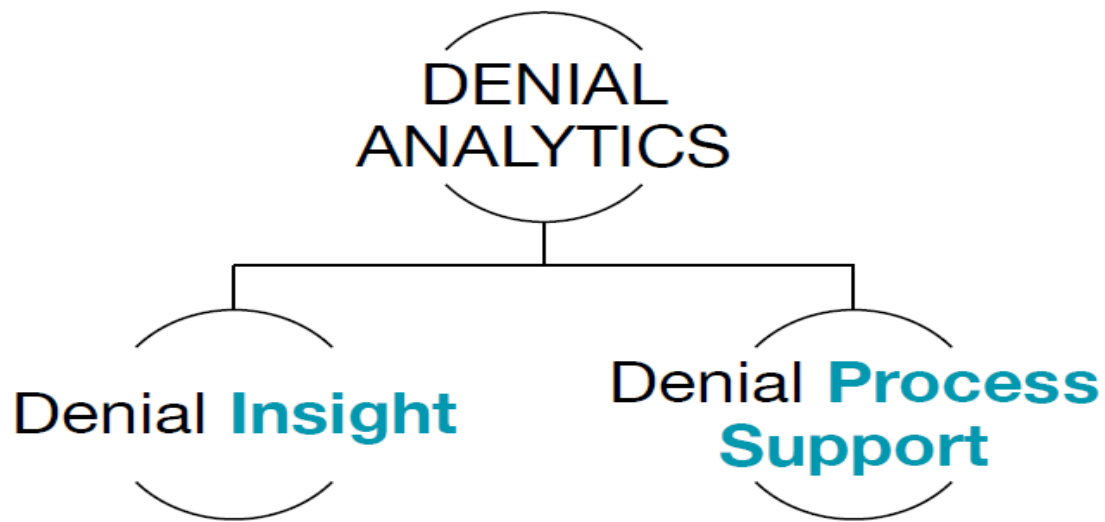
Denial Insight	Denial Process Support
High-level analytics to leadership and upper-level management	*Prioritized worklists and productivity support for managers and staff*
Value – Enterprise process changes for Denial Prevention and Optimizing Denial Management Process Design	*Value - Reduce manual labor and increase speed of recovery in Denial Management Dept*

Client Background

- Large DME Company
- $947,096,697 Billed (2016)
- 851,925 SL Billed
- $20 Million + per month revenue from Insurance Payments
- Presence in all 50 states
- Self-developed PM System

DENIAL ANALYTICS

Denial Insight   Denial Process Support

OrboGraph

Client's Denials Problem

- 41.43% SL Denial Rate (2016)
- 50,000 + Denied SL per month
- 43.57% Denied Charges Rate (2016)
- $40 Million + per month Denied
- Over 15,000 payers (!)
- High Attrition Rate Among Billing Staff

No agreed-upon definition of what constitutes a denial.

Denial Analytics Overview			
Denials by Count		**Denials by Charge**	
Denials Count	Denials Rate	Charges Denied	Charges Denied Rate
352,991	41.43%	$302,568,017	43.57%

DENIAL ANALYTICS

Denial **Insight**   Denial **Process Support**

OrboGraph

Accura XV Tuning & Anywhere Recognition

Accura & OrboAnywhere

Frank Devitta and Boaz Ron

Accura XV Trends

- ## Distribution of item capture continues
  - Throughput requirements
  - Image quality impacts
- ## Automation of Item Validation
  - Payee Name Verification
- ## Reading of "non-traditional fields"
  - Reference Identifiers
- ## Security Continues to tighten
  - Digitally signed files
  - Movement away from Registry acces

Anchoring – Not all Images are captured equally

- Reasons for fields to **shift**
  - Piggy Back like example
  - Scanning rollers out of alignment
  - Mobile Capture
  - RDC

- With Anchoring we find what you want no matter how or where it is.
  - By finding the "Anchor" anywhere on the image, Orbograph adjusts the reco window relative to the Anchor

DECKID: LALAPTBCART2aC7

Exception Code NTX BUS

Date January 1, 2012

TEST ITEM

Amount: 449.81
DR/CR: DR
Print Sequence:
Sequence in Deck: 6113179

Security Cloud
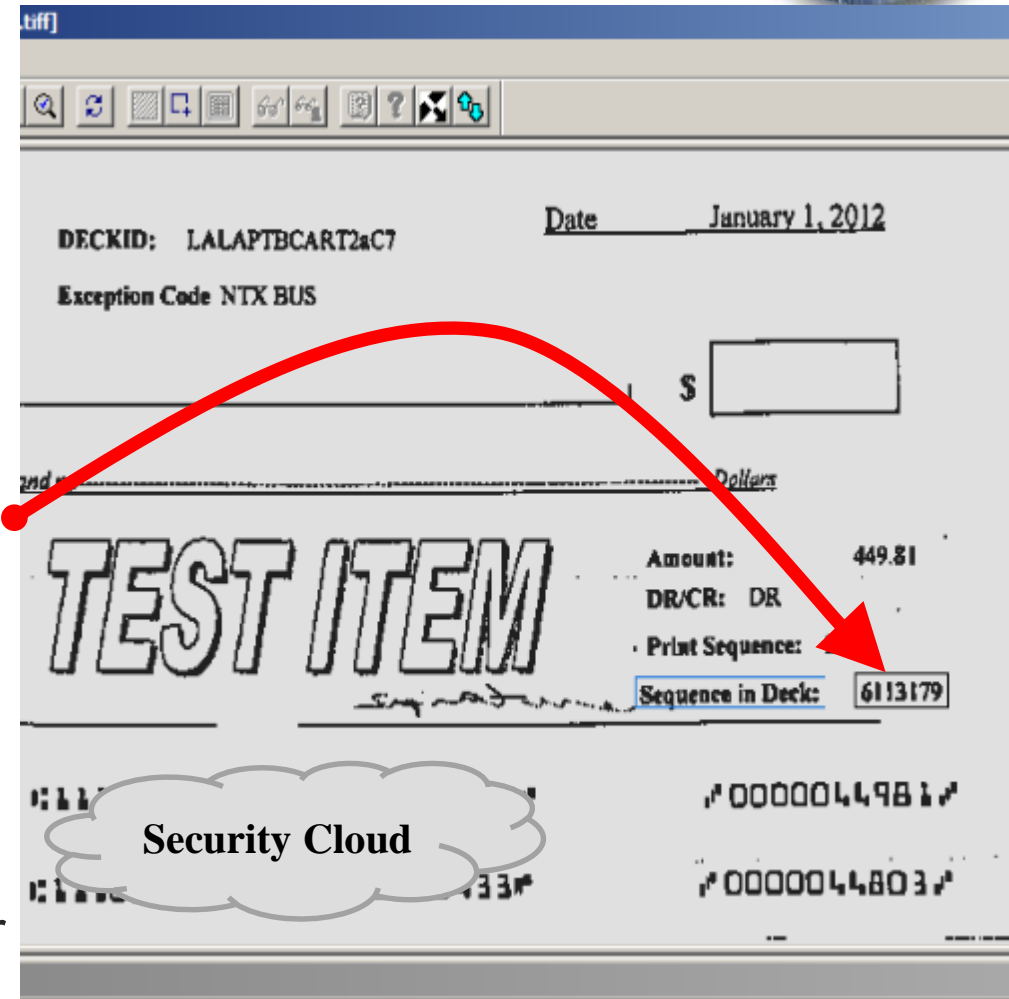
OrboGraph

Orbograph I-care

- Professionals services
  - Tune throughput / high availability
  - Adjust thresholds to maximize performance
  - Create and Modify institution templates
  - Provide operational recommendations
    - Document redesign
    - Hardware recommendations including scanning issues
  - System training & Troubleshooting

Read Rate gains of 5-15% over
"Out of the Box"

OrboGraph

Integration Optimization

Accura & OrboAnywhere

Distributed & Centralized options

- Thread Safe Sync & Async

- Dictionary Payee, PNV, or Reco all in same call.

- Papernames.txt (new optional file – for CS)

- .NET 4.0 required for all engines after 2.1 r3

- Java support for 1.6, 1.7 & 1.8 (with .NET 2 & 4)

- XML results (lets you be picky)

- Fail Over

OrboAnywhere Optimization

Accura & OrboAnywhere

Service Reference integration

- Traditional Send one image Sync - RealTime
- Traditional Send one image Async
- NEW BULK SEND – Sync
- NEW BULK SEND - Async

- Now supports Java, Python….
  – Webservice is agnostic of languages with Transport Encryption.

Payee Verification

Compare Issue Name

To the Payee Name
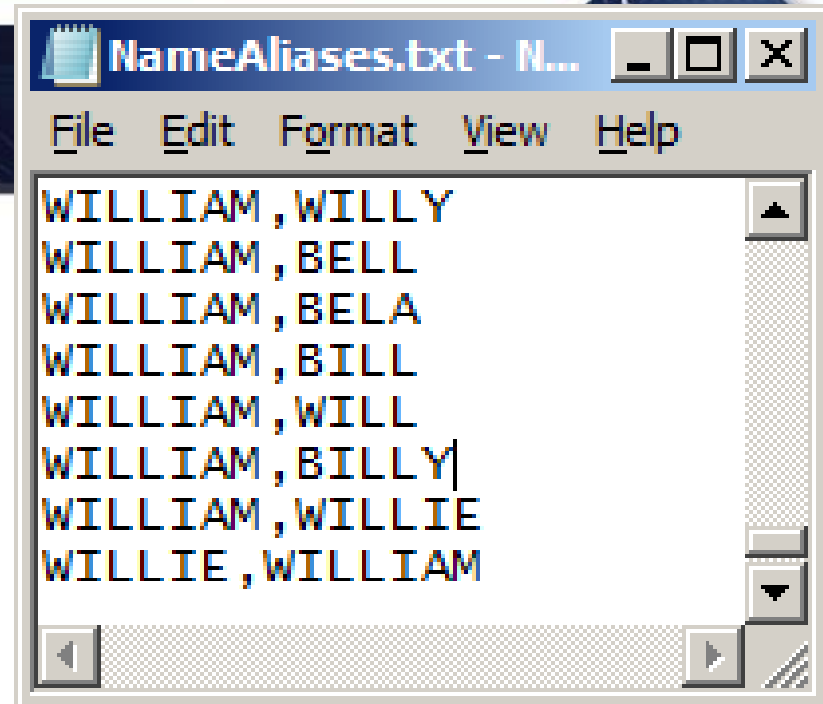
- Matching names give high scores
- Nicknames also return high scores.
  - William Clinton or Bill Clinton…
- Users can add nicknames to our lookup file.

  C:\ orbograph \ engine \ bin \ pprdata \ NameAliases.txt

- Score of 100 = Perfect Match.

NameAliases.txt - N...

File   Edit   Format   View   Help

```
WILLIAM,WILLY
WILLIAM,BELL
WILLIAM,BELA
WILLIAM,BILL
WILLIAM,WILL
WILLIAM,BILLY
WILLIAM,WILLIE
WILLIE,WILLIAM
```

OrboGraph

Owhere App

- Build scenarios for use cases
  - Channel
  - Document type
  - Amount
- Select thresholds
- Tune system
- "Business rules"
- Transaction monitoring

Healthcare Breakout Session
Thursday March 23rd 11AM-12:30PM

Stewart Levine – Vice President - Client Services

Roni Boker – Director Product Management HPAC

Phil Hetrick – HPAC Product Specialist

Bryan Bruton – Healthcare Technology Executive

Agenda

- ## HIPAA & The Cloud

  - {A practical approach to getting things done}

- ## Correspondence Productivity Tracking

- ## Time to Production: Onboarding Challenges

- ## Roadmap 'Teasers' and Feedback

  - Denials Analytics & Decision Support

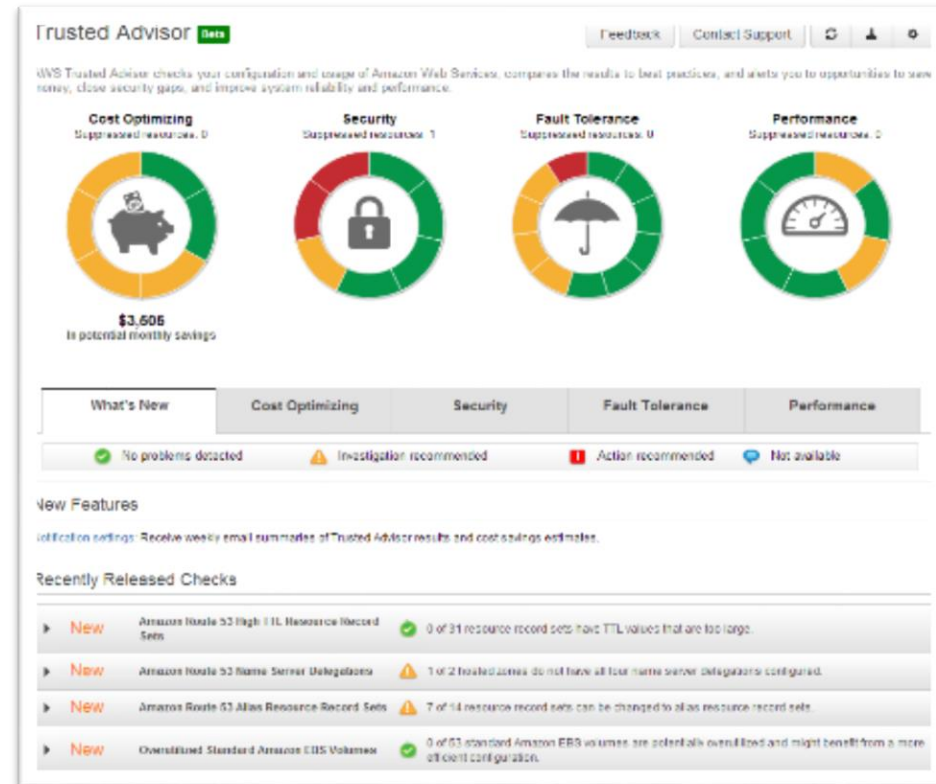 - Interactive EOB

  - Executive dashboard

What is the HIPAA definition of Cloud Computing?

- AWS
  - Security Services
  - System Health
- Orbograph - Dome9 Security Service and Management Tools
  - Monitors
  - Prevents Security Changes
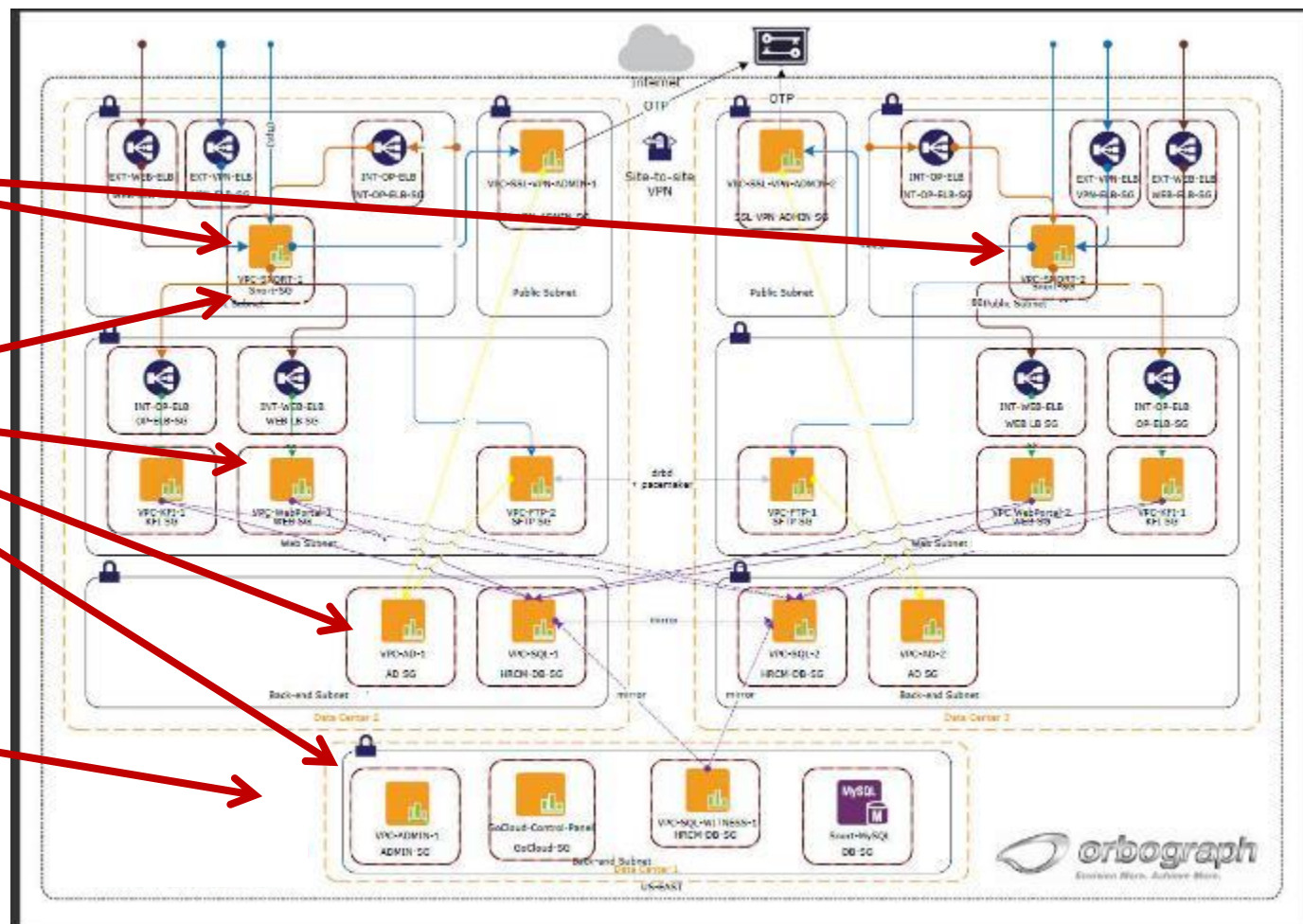 - Proactively reverses changes (i.e. not done through Dome9)

Logical Safeguards

Intrusion
Detection

Multiple
Firewalls

Data is stored
"3 levels deep"
Not directly
accessible

Closing of The
2017 Orbograph Client Conference

What's Actionable?

- Leverage the research
- Test the system…OWhere Test Cloud
- Build out a product plan
- Field testing and customer interaction
- Customer survey
- Customer focus group
- Pre-qualify sales efforts
- Solution rollout

Webinar Series

Converging and Diverging Market Changes in Payments and Check

April 28, 2017 @ 2:00 PM EST

Duration: 30 Minutes

Healthcare Market Overview

May 3, 2017 @ 2:00 PM EST

Duration: 30 Minutes

Payments, Checks and Healthcare: A FinTech Perspective

May 5, 2017 @ 2:00 PM EST

Duration: 30 Minutes

Opportunities in Healthcare Reimbursements, Revenue Cycle Management and Electronification

May 9, 2017 @ 2:00 PM EST

Duration: 30 Minutes

Correspondence Letters & Denied Claims: An Ongoing, Yet Growing Problem

May 12, 2017 @ 2:00 PM EST

Duration: 30 Minutes

The Future is Now in Cloud Deployment for the Financial and Healthcare Industries

May 24, 2017 @ 2:00 PM EST

Duration: 30 Minutes

Final Questions?