

BOIS CAPITAL

Tech Focused, Client Driven

NYC Summit

Telco Big Data Analytics



Open Analytics
Summit

May 8, 2014

BOIS CAPITAL

Bois Capital – An investment Bank Focusing on Technology Sector

Managing Partners have extensive experience in the Telco Big Data analytics sector



Peter Benedict previously served as Vice President and head of Alcatel-Lucent's Customer Experience Analytics business. He was responsible for strategy, product development, R&D and P&L for a suite of Big Data products that address the analytics needs of its fixed and wireless service providers.



Ben Boissevain has extensive corporate finance experience in the Telco sector, closing numerous wireless M&A transactions. He held positions at White & Case, Erste Bank in Vienna and Barclays Capital. Ben has spoken at wireless industry conferences and led the negotiations on a recent Telco Big Data analytics transaction described below.



Tarang Shah has extensive experience in startup transactions and innovation. He was a Venture Capitalist at SoftBank Capital for mobile and software investments, SVP of Mobile, Payment, SaaS and Big Data Innovations at BofA, Lead Product Manager for Ericsson's 3G product line and Marketing Manager at Qualcomm. He is author of book, "Venture Capitalists At Work".

Market Overview:

Telco Analytics is a 3.88 Billion TAM (of which \$1.44 Billion is algorithms)

TOTAL 2011 BUSINESS ANALYTICS TAM =
\$33.8B SOFTWARE ANALYTICS +
\$57.5B BUSINESS ANALYTICS SERVICES

2012 TELCO ANALYTICS APPLICATIONS SOFTWARE & SERVICES
TAM = \$3.88B CAGR = 7.9% (2011 - 2015)

TOTAL TELCO ANALYTICS SW TAM =
\$1.44B

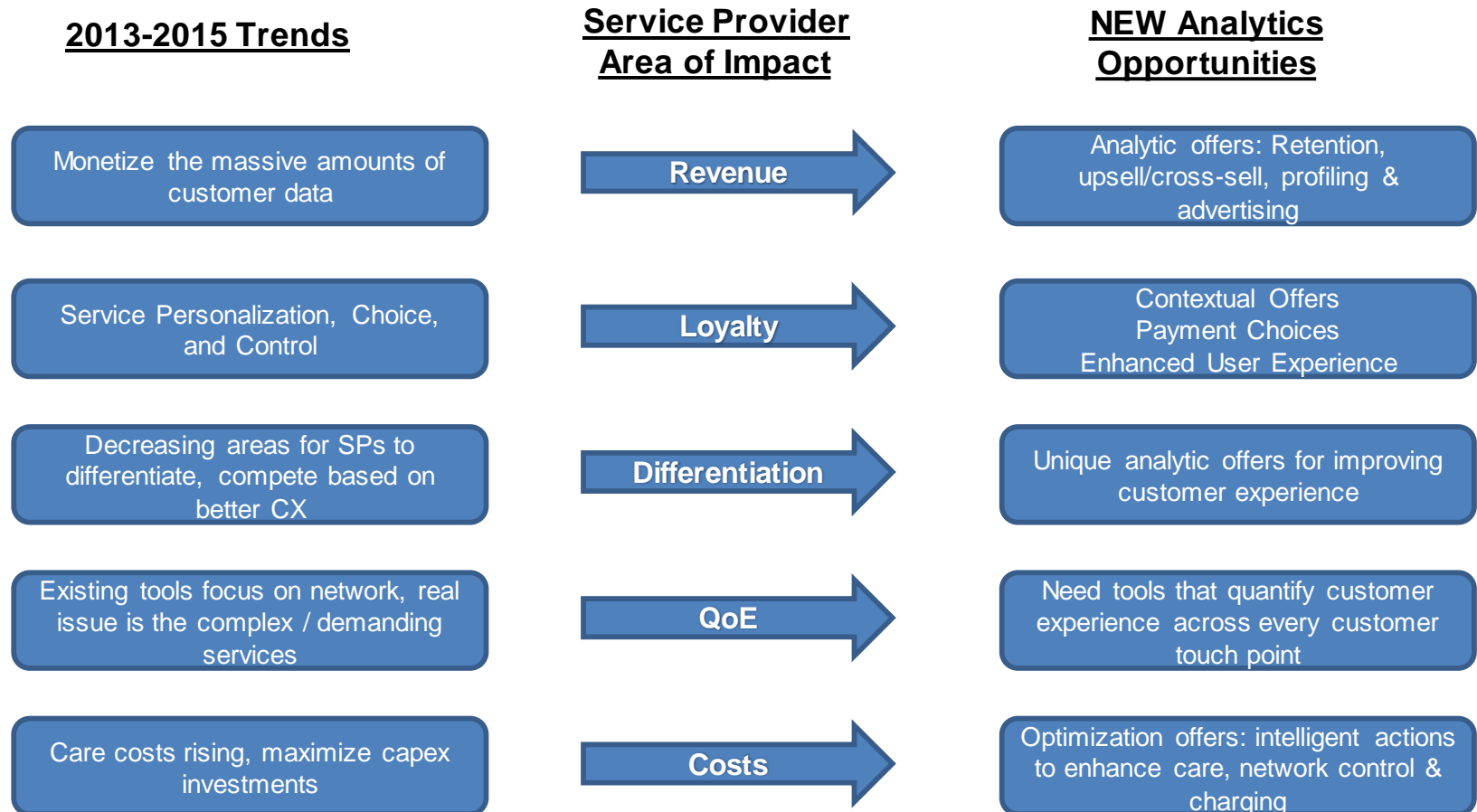
- + Revenue Assurance Analytics
- + Marketing Analytics
- + Customer Care Analytics
- + Network Analytics
- + Service Assurance
- + Service Fulfillment Analytics
- + Service Delivery

*Source: IDC Worldwide Business
Analytics Software 2011-2015 Forecast
and 2010 Vendor Shares*

SOFTWARE ~ 40%, SERVICES ~ 60% overall

Market Overview:

Big Data Analytics is Fundamental to the New Telco Value Chain



A Host of Applications Across Many Stakeholders



Marketing analytics

- Next best offer upsell
- Real time campaign triggering (pers)
- Campaign analytics
- Social media sentiment
- Premium content adoption insights

Retention analytics

- Proactive Churn remediation w/SNA
- Flag sudden behavior change
- Customer micro segmentation
- Cust. loyalty programs

Subscriber analytics

- Customer Lifetime Value (CLV)
- Proactive VIP Management
- Usage tracking for content optimization & targeted advertising

Price analytics

- Price/cross elasticity modeling
- Pricing simulation
- 'What if' scenario modeling

Web Analytics

- Optimization of webpage usage
- targeted online marketing
- Better user experience for online commerce

Brand Analytics

- NPS inference
- Social Media Analytics

Network Diagnostics

- Measuring network (cell sites, etc.) by churn, worst quality, congestion, hot spots, etc.
- Identify reasons for network under usage
- Network optimization - error identification and fix prioritization
- Tracking KPIs and identifying/recommending actions

Network DPI

- Probes-driven traffic insights

Device analytics

- Services, applications/device
- Quality/device
- Profitability/device

Roaming Analytics

- Roaming/calling plan capture and tuning
- Steering
- Revenue capture analysis

Security Analytics

- Subscriber activity and anomalies
- Malware infection
- DNS/DDOS attack

Proactive Action

- Leveraging action engine, based on insights drive actions in network or device

Proactive QoS

- QoS monitoring + root cause analysis
- Fault aggregation/monitoring

CEM/QoE

- QoE w/ segmentation – e.g., VIP, key corp accounts, etc.
- Auto-tracking experience of new customers

Service Performance

- Correlate network performance data against customer KPIs/KQIs
- Identify areas for network optimization, capacity expansion, & performance improvement

Capacity/SLA

- SLAs for MVNOs
- SLAs for enterprise customers
- Capacity planning

Customer Segmentation

- Prioritize by VIP customer segs
- Service profiles
- Applications per customer, device, browser
- Identify heavy users

Customer Behavior

- Content usage monitoring/ subscriber
- Predictive Analytics (Churn, CLV)

Care Analytics

- Feed 360 customer view to agent
- Feed offer recommendations
- Provide root cause analysis
- Dashboard of key call drivers (response time, FCR, call center metrics)
- ViPcare
- Device usage
- Social Media Analytics

Revenue Analytics

- Financial scorecard analytics
- Revenue assurance
- Fraud detection
- Margin management
- Carrier reconciliation
- Customer lifecycle management
- Bill shock
- CLV

This is a list based on an analysis of many of the current telco analytics companies and their marketed offers/insights

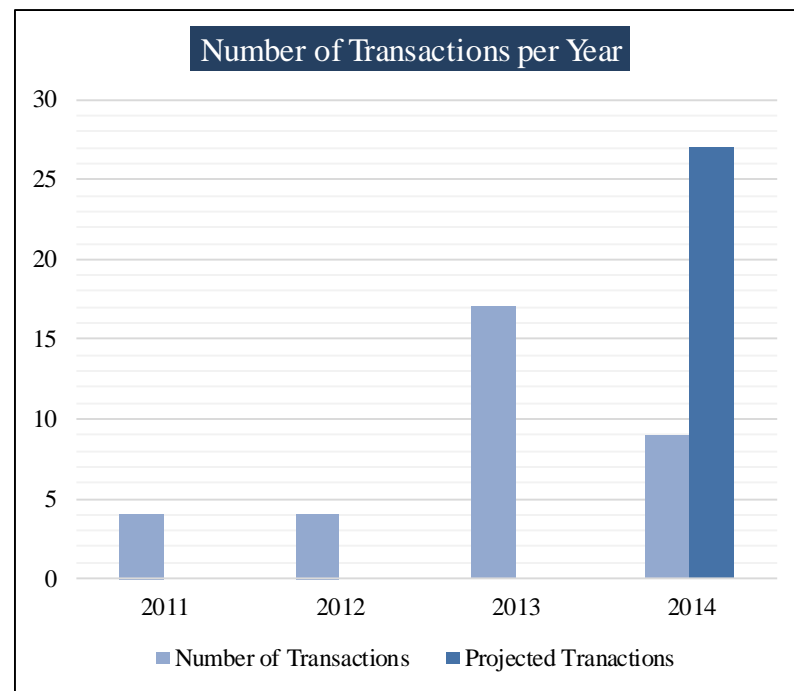
Driver in M&A today

- Macro Industry Trends Driving an Increased Number of Transactions
 - Network quality monitoring is shifting focus from Quality of Service to Quality of Experience.
 - Customer experience is becoming ever more critical to reduce churn and differentiate from the competition. Hence the tools to better track QoE, as an analog for customer experience, are increasing in importance.
 - Existing solutions such as Mobile Device Management (MDM), and policy & pricing optimization solutions (PCRF) leverage analytics to better inform and optimize their value proposition.
 - Mobile marketing requires an increasingly granular understanding of customers, their locations, preferences, profiles, activities and experience to anticipate the next best offer.
 - Probe vendors need to move up the value chain by providing insights on top of the deep network statistics they capture.

Current Valuation Overview

- Precedent Transactions

- Mean Valuation 4.96x Revenue
- Statistical Sampling Indicative of the larger trend
- Increasing Consolidation in the Telco Big Data Analytics Sector
- Providers leverage data in new ways to
 - enhance value of their offers
 - decrease costs
 - increase customer satisfaction and retention
- Rapid Increase in Number of Transactions per Year



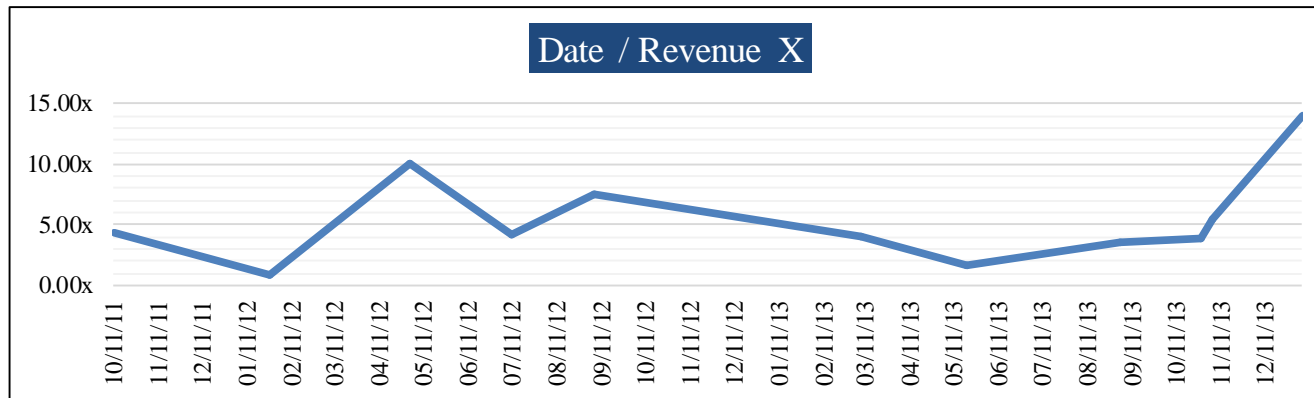
In the near future, the number of big players interested in making an acquisition in the sector will decrease as many big players will have already acquired in the sector or built internally

Significant Precedent Transactions

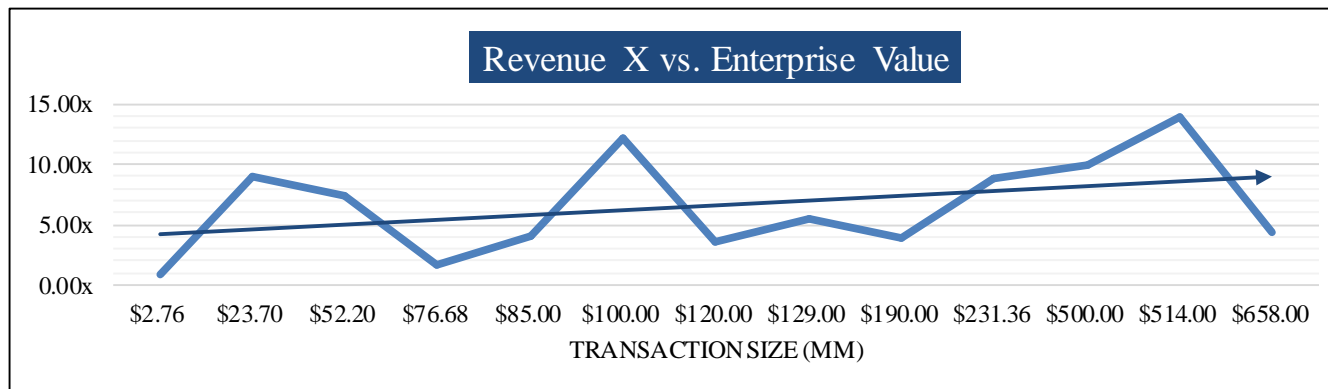
| Date | Acquirer | Target | Target Summary | Enterprise Value | Revenue (TTM) | EV / Target Revenue |
|-----------------|---------------------------------------|-----------------------------------|--|------------------|---------------|---------------------|
| 2/20/2014 | Astellia SA (DB:4AS) | Ingenia Telecom, S.L. | Provides network analysis and optimization solutions for mobile operators. | N/A | N/A | N/A |
| 2/18/2014 | Spirent Communications Plc. (LSE:SPT) | DAX Technologies Corp. | Customer experience management system for communications companies. | \$37.00 | N/A | N/A |
| 1/6/2014 | Verint Systems (NasdaqGS:VRNT) | KANA Software, Inc. | Develops software solutions for service experience management. | \$514.00 | \$36.9 | 13.93x |
| 11/5/2013 | Amdocs Limited (NasdaqGS:DOX) | Celcite Management Solutions, LLC | Provides optimization solutions for wireless technologies worldwide. | \$129.00 | \$23.4 | 5.51x |
| 10/29/2013 | Ixia (NasdaqGS:XXIA) | Net Optics, Inc. | Delivers real-time network intelligence in network monitoring and security. | \$190.00 | \$48.72 | 3.90x |
| 9/3/2013 | Amdocs Limited (NYSE:DOX) | Actix, Ltd. | Offers mobile network analytics and optimization solutions. | \$120.00 | \$34.01 | 3.53x |
| 10/1/2013 | IBM (NYSE:IBM) | The Now Factory Ltd | The Now Factory Ltd designs and develops IP intelligence solutions. | N/A | N/A | N/A |
| 5/20/2013 | Genesys Telecommunications | SoundBite Communications, Inc. | Provides cloud-based mobile proactive customer care, and collections/payments solutions. | \$76.68 | \$47.93 | 1.60x |
| 3/8/2013 | JDS Uniphase (NasdaqGS:JDSU) | Arieso Ltd. | Provides automatic network optimization solutions. | \$85.00 | \$20.75 | 4.10x |
| 10/23/2013 | Infovista (EPA:IFV) | Aexio | Provides network optimization software solutions, especially among mobile operators. | N/A | N/A | N/A |
| 9/6/2012 | Spirent Communications Plc. (LSE:SPT) | Metrico Wireless, Inc. | Provides mobile device performance analytics to wireless carriers. | \$52.20 | \$7.0 | 7.46x |
| 7/11/2012 | Xerox Corporation (NYSE:XRX) | Wireless Data Services | Provides customer service solutions to technology and telecommunications brands. | \$95.00 | \$22.8 | 4.17x |
| 5/2/2012 | IBM (NYSE:IBM) | TeaLeaf Technology, Inc. | Provides customer experience management solutions for companies. | \$500.00 | \$50.0 | 10.00x |
| 1/26/2012 | Comptel Oyj (HLSE:CTL1V) | Xtract Oy | Analytics platform uses social media intelligence to provide customer analytics solutions. | \$2.76 | \$3.12 | 0.88x |
| 10/11/2011 | NeuStar, Inc. (NYSE:NSR) | Targus Information Corporation | Provides real-time and on-demand information services. | \$658.00 | \$149.3 | 4.41x |
| Outliers | | | | | | |
| Samples | | | | | | 9 |
| Low | | | | | | 1.60x |
| Medium | | | | | | 4.17x |
| High | | | | | | 10.00x |
| Mean | | | | | | 4.96x |

Significant Precedent Transactions

- Wide variations in revenue multiples are revealed



- Size Matters – larger transactions, higher revenue multiples



- **Company valuation depends on its size, how hot the sub-sector is, IP ownership, revenue recurrence model, and the competitiveness of the sales process**
- **Bois Capital has seen for sub \$100m revenue companies multiples generally at 3-**

Case Study

- Recently Advised Swiss Mobility Solutions
 - Swiss-based
 - B2B provider of mobile device agent analytics solutions for assessing Customer Experience and Network Quality for Mobile Broadband services
 - Sale to Gemalto (EPA:GTO) based in the Netherlands
 - Market Capitalization of €7.4 billion
 - Transaction Closed March 2014



Case Study

- **Bois Capital contacted over 60 companies in the following six categories**
 - Large telecom vendors
 - Mobile network quality companies
 - Telecom professional services companies
 - Probe vendors
 - Policy and mobile device management providers
 - Private equity firms
- **Over 30 of those companies have a strategic mandate to acquire a company in the Telco Big Data analytics sector**
 - and have the wherewithal to pull off the transaction and leverage existing customer relationships and distribution channels to create sizeable offering in this space.
- **These players are actively searching for the right acquisition targets.**

M&A Market and Process

- Typical process – explore the market, determine interest in a strategic sale and complete the transaction in around six months
- Very streamlined process to help secure the right strategic partner and valuation for its clients
 1. Work closely with the client to develop a select list of potential acquirers, a blind profile, 25+ page Confidential Information Memorandum and a detailed valuation model.
 2. Distribute the blind profile to highly vetted list of potential acquirers, share and discuss the Confidential Information Memorandum under the NDA with ones with strong interest in exploring acquisition.
 3. Follow up management presentations and in-person meetings for those interested in taking a deeper look.
 4. Coordinate the bidding process, solicits preliminary non-binding offers, set up virtual data rooms and support the selection of a finalist.
 5. Assist with negotiations on valuation and deal structure, support and guide the due diligence process and eventual closing of the transaction.

M&A Market and Process

- **Bois Capital** has a deep sector experience, senior level connections and execution expertise in the Telco Big Data analytics sector.
- If you are interested in exploring your growth options including a strategic exit, Bois Capital will be happy to schedule a brainstorming session, discuss the dynamics of your business, the strategic fit with potential targets within the analytics ecosystem, provide valuation metrics, and confidentially discuss the next steps.

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