

Market for Telecom Structured Data, Big Data, and Analytics: Business Case, Analysis and Forecasts 2015 - 2020

<https://marketpublishers.com/r/M12ADC40114EN.html>

Date: February 2015

Pages: 153

Price: US\$ 2,995.00 (Single User License)

ID: M12ADC40114EN

Abstracts

Overview:

The telecommunications industry is investing heavily in developing the analytical tools and services to take advantage of both their traditional structured data and unstructured (big) data resources. The goals of each carrier program vary, but share some commonalities including the desire to improve business intelligence gathering, customer care and operations. Carriers are also working diligently to better understand how to monetize data assets, which is often manifest in new products and services at the business-to-business (B2B) level.

This report provides an in-depth assessment of the global Big Data and telecom analytics markets, including a study of the business case, application use cases, vendor landscape, value chain analysis, case studies and a quantitative assessment of the industry from 2015 to 2020. All purchases of Mind Commerce reports includes time with an expert analyst who will help you link key findings in the report to the business issues you're addressing. This needs to be used within three months of purchasing the report.

Target Audience:

Telecom network operators

Telecom infrastructure suppliers

Big Data and analytics companies

Data as a Service (DaaS) companies

Cloud-based service providers of all types

Data processing and management companies

Application Programmer Interface (API) companies

Public investment organizations including investment banks

Private investment including hedge funds and private equity

Report Benefits:

Forecasts telecom related Big Data from 2015 to 2020

Understand the emerging need for Big Data mediation

Identify telecom structured data services and solutions

Identify sources of data from next generation applications

Understand unstructured (Big) data systems and solutions

Learn about sources of data in telecom systems and processes

Understand the role and importance of deep packet inspection

Contents

1 INTRODUCTION

- 1.1 Executive Summary
- 1.2 Topics Covered
- 1.3 Key Findings
- 1.4 Target Audience
- 1.5 Companies Mentioned

2 BIG DATA TECHNOLOGY AND BUSINESS CASE

- 2.1 Structured vs. Unstructured Data
 - 2.1.1 Structured Database Services in Telecom
 - 2.1.2 Unstructured Data from Apps and Databases in Telecom
 - 2.1.3 Emerging Hybrid (Structured/Unstructured) Database Services
- 2.2 Defining Big Data
- 2.3 Key Characteristics of Big Data
 - 2.3.1 Volume
 - 2.3.2 Variety
 - 2.3.3 Velocity
 - 2.3.4 Variability
 - 2.3.5 Complexity
- 2.4 Capturing Data through Detection and Social Systems
 - 2.4.1 Data in Social Systems
 - 2.4.2 Detection and Sensors
 - 2.4.3 Sensors in the Consumer Sector
 - 2.4.4 Sensors in Industry
- 2.5 Big Data Technology
 - 2.5.1 Hadoop
 - 2.5.1.1 MapReduce
 - 2.5.1.2 HDFS
 - 2.5.1.3 Other Apache Projects
 - 2.5.2 NoSQL
 - 2.5.2.1 Hbase
 - 2.5.2.2 Cassandra
 - 2.5.2.3 Mongo DB
 - 2.5.2.4 Riak
 - 2.5.2.5 CouchDB

2.5.3 MPP Databases

2.5.4 Others and Emerging Technologies

2.5.4.1 Storm

2.5.4.2 Drill

2.5.4.3 Dremel

2.5.4.4 SAP HANA

2.5.4.5 Gremlin & Giraph

2.6 Business Drivers for Telecom Big Data and Analytics

2.6.1 Continued Growth of Mobile Broadband

2.6.2 Competition from New Types of Service Providers

2.6.3 New Technology Investment

2.6.4 Need for New KPIs

2.6.5 Artificial Intelligence and Machine Learning

2.7 Market Barriers

2.7.1 Privacy and Security: The 'Big' Barrier

2.7.2 Workforce Re-skilling and Organizational Resistance

2.7.3 Lack of Clear Big Data Strategies

2.7.4 Technical Challenges: Scalability and Maintenance

3 KEY BIG DATA INVESTMENT SECTORS

3.1 Industrial Internet and M2M

3.1.1 Big Data in M2M

3.1.2 Vertical Opportunities

3.2 Retail and Hospitality

3.2.1 Improving Accuracy of Forecasts and Stock Management

3.2.2 Determining Buying Patterns

3.2.3 Hospitality Use Cases

3.3 Media

3.3.1 Social Media

3.3.2 Social Gaming Analytics

3.3.3 Usage of Social Media Analytics by Other Verticals

3.4 Utilities

3.4.1 Analysis of Operational Data

3.4.2 Application Areas for the Future

3.5 Financial Services

3.5.1 Fraud Analysis & Risk Profiling

3.5.2 Merchant-Funded Reward Programs

3.5.3 Customer Segmentation

- 3.5.4 Insurance Companies
- 3.6 Healthcare and Pharmaceutical
 - 3.6.1 Drug Development
 - 3.6.2 Medical Data Analytics
 - 3.6.3 Case Study: Identifying Heartbeat Patterns
- 3.7 Telecom Companies
 - 3.7.1 Telco Analytics: Customer/Usage Profiling and Service Optimization
 - 3.7.2 Speech Analytics
 - 3.7.3 Other Use Cases
- 3.8 Government and Homeland Security
 - 3.8.1 Developing New Applications for the Public
 - 3.8.2 Tracking Crime
 - 3.8.3 Intelligence Gathering
 - 3.8.4 Fraud Detection and Revenue Generation
- 3.9 Other Sectors
 - 3.9.1 Aviation: Air Traffic Control
 - 3.9.2 Transportation and Logistics: Optimizing Fleet Usage
 - 3.9.3 Sports: Real-Time Processing of Statistics

4 THE BIG DATA VALUE CHAIN

- 4.1 Fragmentation in the Big Data Value Chain
- 4.2 Data Acquisition and Provisioning
- 4.3 Data Warehousing and Business Intelligence
- 4.4 Analytics and Virtualization
- 4.5 Actioning and Business Process Management (BPM)
- 4.6 Data Governance

5 BIG DATA IN TELECOM ANALYTICS

- 5.1 Telecom Analytics Market 2015 - 2020
- 5.2 Improving Subscriber Experience
 - 5.2.1 Generating a Full Spectrum View of the Subscriber
 - 5.2.2 Creating Customized Experiences and Targeted Promotions
 - 5.2.3 Central Big Data Repository: Key to Customer Satisfaction
 - 5.2.4 Reduce Costs and Increase Market Share
- 5.3 Building Smarter Networks
 - 5.3.1 Understanding Network Utilization
 - 5.3.2 Improving Network Quality and Coverage

5.3.3 Combining Telecom Data with Public Data Sets: Real-Time Event Management

5.3.4 Leveraging M2M for Telecom Analytics

5.3.5 M2M, Deep Packet Inspection and Big Data: Identifying & Fixing Network

Defects

5.4 Churn/Risk Reduction and New Revenue Streams

5.4.1 Predictive Analytics

5.4.2 Identifying Fraud and Bandwidth Theft

5.4.3 Creating New Revenue Streams

5.5 Telecom Analytics Case Studies

5.5.1 T-Mobile USA: Churn Reduction by 50%

5.5.2 Vodafone: Using Telco Analytics to Enable Navigation

5.6 Carriers, Analytics, and Data as a Service (DaaS)

5.6.1 Carrier Data Management Operational Strategies

5.6.2 Network vs. Subscriber Analytics

5.6.3 Data and Analytics Opportunities to Third Parties

5.6.4 Carriers to offer Data as a Service (DaaS) on B2B Basis

5.6.5 DaaS Planning and Strategies

5.6.6 Carrier Monetization of Data with DaaS

5.7 Opportunities for Carriers in Cloud Analytics

5.7.1 Carrier NFV and Cloud Analytics

5.7.2 Carrier Cloud OSS/BSS Analytics

5.7.3 Carrier Cloud Services, Data, and Analytics

5.7.4 Carrier Performance Management and the Cloud Analytics

6 STRUCTURED DATA IN TELECOM ANALYTICS

6.1 Telecom Data Sources and Repositories

6.1.1 Subscriber Data

6.1.2 Subscriber Presence and Location Data

6.1.3 Business Data: Toll-free and other Directory Services

6.1.4 Network Data: Deriving Data from Network Operations

6.2 Telecom Data Mining

6.2.1 Data Sources: Rating, Charging, and Billing Examples

6.2.2 Privacy Issues

6.3 Telecom Database Services

6.3.1 Calling Name Identity

6.3.2 Subscriber Data Management (SDM) Services

6.3.3 Other Data-intensive Service Areas

6.3.4 Emerging Service Area: Identity Verification

6.4 Structured Telecom Data Analytics

6.4.1 Dealing with Telecom Data Fragmentation

6.4.2 Deep Packet Inspection

7 KEY PLAYERS IN THE BIG DATA MARKET

7.1 Vendor Assessment Matrix

7.2 Apache Software Foundation

7.3 Accenture

7.4 Amazon

7.5 APTEAN (Formerly CDC Software)

7.6 Cisco Systems

7.7 Cloudera

7.8 Dell

7.9 EMC

7.10 Facebook

7.11 GoodData Corporation

7.12 Google

7.13 Guavus

7.14 Hitachi Data Systems

7.15 Hortonworks

7.16 HP

7.17 IBM

7.18 Informatica

7.19 Intel

7.20 Jaspersoft

7.21 Microsoft

7.22 MongoDB (Formerly 10Gen)

7.23 MU Sigma

7.24 Netapp

7.25 Opera Solutions

7.26 Oracle

7.27 ParStream

7.28 Pentaho

7.29 Platfora

7.30 Qliktech

7.31 Quantum

7.32 Rackspace

7.33 Revolution Analytics

- 7.34 Salesforce
- 7.35 SAP
- 7.36 SAS Institute
- 7.37 Sisense
- 7.38 Software AG/Terracotta
- 7.39 Splunk
- 7.40 Sqrrl
- 7.41 Supermicro
- 7.42 Tableau Software
- 7.43 Teradata
- 7.44 Think Big Analytics
- 7.45 Tidemark Systems
- 7.46 VMware (Part of EMC)

8 MARKET ANALYSIS

- 8.1 Market for Structured Telecom Data Services
- 8.2 Market for Unstructured (Big) Data Services
 - 8.2.1 Big Data Revenue 2015 - 2020
 - 8.2.2 Big Data Revenue by Functional Area 2015 - 2020
 - 8.2.3 Big Data Revenue by Region 2015 - 2020

9 SUMMARY AND RECOMMENDATIONS

- 9.1 Key Success Factors for Carriers
 - 9.1.1 Leverage Real-time Data
 - 9.1.2 Recognize that Analytics is Not Business Intelligence
 - 9.1.3 Provide Data Discovery Services
 - 9.1.4 Provide Big Data and Analytics to Enterprise Customers
- 9.2 The Role of Intermediaries in the Ecosystem
 - 9.2.1 Cloud and Big Data Intermediation
 - 9.2.2 Security, Communications, Billing, and Settlement
 - 9.2.3 The Case for Data as a Service (DaaS)

10 APPENDIX: UNDERSTANDING BIG DATA ANALYTICS

- 10.1 What is Big Data Analytics?
- 10.2 The Importance of Big Data Analytics
- 10.3 Reactive vs. Proactive Analytics

10.4 Technology and Implementation Approaches

10.4.1 Grid Computing

10.4.2 In-Database processing

10.4.3 In-Memory Analytics

10.4.4 Data Mining

10.4.5 Predictive Analytics

10.4.6 Natural Language Processing

10.4.7 Text Analytics

10.4.8 Visual Analytics

10.4.9 Association Rule Learning

10.4.10 Classification Tree Analysis

10.4.11 Machine Learning

10.4.11.1 Neural Networks

10.4.11.2 Multilayer Perceptron (MLP)

10.4.11.3 Radial Basis Functions

10.4.11.4 Support Vector Machines

10.4.11.5 Naïve Bayes

10.4.11.6 k-nearest Neighbours

10.4.11.7 Geospatial Predictive Modelling

10.4.12 Regression Analysis

10.4.13 Social Network Analysis

Figures

FIGURES

- Figure 1: Hybrid Data in Next Generation Applications
- Figure 2: Big Data Components
- Figure 3: Big Data Sources
- Figure 4: Capturing Data from Detection Systems and Sensors
- Figure 5: Capturing Data across Sectors
- Figure 6: AI Structure
- Figure 7: The Big Data Value Chain
- Figure 8: Telco Analytics Investments Driven by Big Data: 2015 - 2020
- Figure 9: Different Data Types within Telco Environment
- Figure 10: Presence-enabled Application
- Figure 11: Calling Name (CNAM) Service Operation
- Figure 12: Subscriber Data Management (SDM) Ecosystem
- Figure 13: Data Fragmented across Telecom Databases
- Figure 14: Telecom Deep Packet Inspection Revenue 2015 - 2020
- Figure 15: Big Data Vendor Ranking Matrix
- Figure 16: Unified Communications Incoming Call Routing
- Figure 17: Network Level Outbound Call Management
- Figure 18: Big Data Revenue: 2015 - 2020
- Figure 19: Big Data Revenue by Functional Area: 2015 - 2020
- Figure 20: Big Data Revenue by Region: 2015 - 2020
- Figure 21: Data Mediation for Structured and Unstructured Data
- Figure 21: Cloud and Big Data Intermediation
- Figure 22: Data Security, Billing and Settlement
- Figure 24: Big Data as a Service (BDaaS)

I would like to order

Product name: Market for Telecom Structured Data, Big Data, and Analytics: Business Case, Analysis and Forecasts 2015 - 2020

Product link: <https://marketpublishers.com/r/M12ADC40114EN.html>

Price: US\$ 2,995.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/M12ADC40114EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

