LET THE TRANSFORMATION BEGIN
Big Data Analytics Journey
The world is changing massively

- **MORE PEOPLE**: 7 billion connected people
- **MORE DEVICES**: 30 billion connected devices
- **MORE DIGITALISATION**: 44 zettabytes of data
- **INFO GENERATION**: APJ 3.7 billion connected people, APJ 8.6 billion connected devices

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Technology is transforming the way we live and work at an ever-increasing pace.

We need **everything** now.

We work whenever and **wherever**.

We love data and want **to do more** with it.

We are at **more risk** than ever before.
Industries are changing quickly

- Transportation
- Hotel chains
- Book industry
- Music industry
- DVD/movie industry
- Financial sector
- Distribution
- Travel industry
- Medicine
- Automotive
- Communication
- Health/Wellness
- Newspapers
- Media
- Real Estate
Your business must evolve.

Future success is achieved by unlocking **ALL DATA**
Traditional analytics

- Reactive and slow
- Limited to static data
- Restricted sources & access
Modern analytics

Anywhere, anytime
Analyze ALL data
Empower end users
Traditional data

- Isolated data silos
- Incomplete and fragmented
- Limited visibility
Data integration

- Unify data types
- Incorporate diverse sources
- Provide a comprehensive view
Traditional infrastructure

- Isolated single task architectures
- Rigid implementation
- Constrained and limited
Scale capacity & capability easily
Adapt with agile architectures
Enhance utilization with dynamic platforms

Modern infrastructure
“Organizations do not need a big data strategy; they need a business strategy that incorporates big data.”

BILL SCHMARZO
CTO, Dell EMC GLOBAL SERVICES
BIG DATA IS A JOURNEY. THE DATA LAKE IS THE FOUNDATION OF THAT JOURNEY TO A FUTURE STATE WHERE DATA AND ANALYTICS ARE AT THE CORE OF THE ENTERPRISE.

DELL EMC HELPS CUSTOMERS DEVELOP A BUSINESS STRATEGY THAT INCORPORATES BIG DATA ANALYTICS.
BIG DATA BUSINESS MODEL MATURITY INDEX

Measures degree to which organizations have integrated data and analytics into their business models.

Key Business Processes

Economic Drivers

BUSINESS OPTIMIZATION

BUSINESS METAMORPHOSIS

MONETIZATION

BUSINESS MONITORING

BUSINESS INSIGHTS

Prescriptive Recommendations
OUR FRAMEWORK TO A BIG DATA STRATEGY
DEVELOPING A BIG DATA BUSINESS STRATEGY

• Step 1 : Understand Business Initiatives
• Step 2 : Identify Business Use Cases
• Step 3 : Define Data Requirements
• Step 4 : Develop a Data Science Plan
• Step 5 : Develop a Technology Plan
THE BIG DATA PRACTICE – WHO ARE WE?

• The de facto Big Data Practice Services Team within DELL EMC

• We architect and implement next generation Big Data / Data Lake and Analytical solutions

• Our team of consultants & SME experts use deep knowledge of Big Data, Analytics and the industry leading technologies to accelerate the time to value of data

• We are business centric and technology agnostic we use the likes of Cloudera, Hortonworks, IBM, Pivotal, SAS and Tableau etc to deliver outstanding big data technology solutions for our customers

• We are an end-to-end solutioning team
WHAT ARE OUR CAPABILITIES?

EXPERT SERVICES

BIG DATA & ANALYTICS
(Product / Technology Agnostic)

DATA ARCHITECTURE
(Ingestion, Transformation, Processing, Security, Governance)

ADVANCED SERVICES

DATA LAKES / DWH TRANSFORMATION

REAL-TIME & IN-MEMORY

DATA SCIENCE & DATA MODELLING

We Work Alongside Customers to Plan, Build and Integrate Big Data Solutions

• Requirements-Driven Custom Services
• Expert Staffing and Skills Augmentation
• Deep Experience In Big Data Analytics
• End-to-End Solutioning Across The Stack
• DWH Transformations to Big Data
• BDaaS, PaaS, IaaS & More

WORKSHOP ROADMAP ONBOARD ENHANCE
## OUR SECTOR EXPERIENCE

<table>
<thead>
<tr>
<th>FSI</th>
<th>TELCO</th>
<th>RETAIL</th>
<th>E-COMMERCE</th>
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<tbody>
<tr>
<td>HEALTH CARE</td>
<td>GOVERNMENT</td>
<td>GAMBLING</td>
<td>PHARMACEUTICAL</td>
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<tr>
<td>AIRLINES</td>
<td>INSURANCE</td>
<td>MINING</td>
<td>ENERGY</td>
</tr>
<tr>
<td>SMART CITIES</td>
<td>MANUFACTURING</td>
<td>OIL &amp; GAS</td>
<td>EDUCATION</td>
</tr>
</tbody>
</table>
OUR BIG DATA PRACTICE PROCESS
ACCELERATE A STRATEGIC BUSINESS INITIATIVE WITH BIG DATA ANALYTICS

ASSESS

Identify and prioritize an analytics use case that offers an optimal combination or business benefits and implementation feasibility.

PROVE

Demonstrate how the analytics use case would deliver analytic lift if put into production and prove the potential ROI.

DEPLOY

Implement the analytics use case into production to create an operational Big Data solution to a business problem.
Identify and prioritize an analytics use case that offers an optimal combination of business benefits and implementation feasibility.

Demonstrate how the analytics use case would deliver analytic lift if put into production and prove the potential ROI.

Implement the analytics use case into production to create an operational Big Data solution to a business problem.

Assess the current state against the goals for adding new capabilities. Assess technology gaps, and develop a future state architecture with implementation roadmap.

Prove that the technology delivers the required technical capabilities within the customer environment.

Implement the technologies and processes into production to enable the required Big Data capabilities.

**OUR BIG DATA PRACTICE APPROACH**

**BUSINESS**

**TECHNOLOGY**

Big Data Vision Workshop

**ASSESS**

Big Data Proof of Value

Big Data Applied Analytics Implementation

Big Data Module (BDM)
- Software Installation
- BDL (analytics) Implementation

**PROVE**

Big Data Proof of Technology

**DEPLOY**

Big Data Technology Implementation
## OUR THREE PHASE PROCESS

**OUR APPROACH DEMONSTRATES HOW BIG DATA CAN BE USED TO CREATE VALUE AND TRANSFORM THE BUSINESS**

<table>
<thead>
<tr>
<th>White Boarding Workshop (1/2 Day)</th>
<th>Technology Onboarding</th>
<th>Operationalization Project 1-12 MONTHS</th>
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<tbody>
<tr>
<td>Understand your business &amp; IT goals, strategy, and objectives</td>
<td>Demonstrate the value of big data and data science to your business</td>
<td>Extend the minimum viable product application or process.</td>
</tr>
<tr>
<td>Identify key initiatives</td>
<td>Source and prepare data relevant to the chosen use-case</td>
<td>Build in an iterative fashion to ensure that insights create lasting value.</td>
</tr>
<tr>
<td>Detailed environment review</td>
<td>Perform statistical analysis and build models in an iterative and collaborative fashion</td>
<td>Embed data science into business processes</td>
</tr>
<tr>
<td>Prioritization of use cases &amp; identifying the right big data use cases for your organization</td>
<td>Create a ‘minimum viable product’ application or process that turns insight into business value</td>
<td>Move toward becoming a predictive enterprise.</td>
</tr>
<tr>
<td>Data source review</td>
<td>Build the initial platform with the right technologies to demonstrate the value</td>
<td></td>
</tr>
<tr>
<td>Identify how to demonstrate the value that use-case can create business value.</td>
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</table>
POV - SHOW THE BUSINESS VALUE

PROOF OF VALUE SERVICE

Gather and analyze variety of data sources

Prepare and enrich data; build analytic models

Discuss people and process impact

Produce high-level ROI and prove analytic lift

VALIDATE VALUE OF THE BIG DATA WORKSHOP USE CASE
Gather and analyze variety of data sources

Prepare, configure and build the new environment (both HW & Software)

Discuss people and process. Use technology to be more efficient end-to-end

Produce high-level results and demonstrate the core capabilities

VALIDATE THE CAPABILITIY OF MULTIPLE BIG DATA TECHNOLGIES
ADOPTING A MODERN DATA LAKE ARCHITECTURE
ADOPT A MODERN DATA LAKE ENVIRONMENT

All Data Fed Into The Data Lake

HADOOP DATA LAKE

ISILON SCALE OUT NAS STORAGE

ETL

Data Prep & Enrichment

BI / DWH Environment
- Production
- Predictable Load
- SLA Drive
- Heavily Governed
- Standard Tools

Active Archive

Analytics / Sandbox Environment
- Exploratory, Ad Hoc
- Unpredictable Load
- Experimentation
- Loosely Governed
- Best Tools
- Self Service

Hadoop as the Foundation of your Data Management and Analytics Architecture

Internal Use - Confidential
THE DELL EMC BIG DATA SOLUTION
SANDBOX / PLAYGROUND – SELF SERVE

SEE
MARKETING = 1 SANDBOX

LEARN
NETWORK = 2 SANDBOXES
FINANCE = 1 SANDBOX
QUALITY = 1 SANDBOX
CORPORATE = 1 SANDBOX

DO

VALUE

APP

TIME

SANDBOX

PROTOTYPE

PRODUCTION
WE HELP CUSTOMERS ALONG THEIR JOURNEY
CALL TO ACTION:

BIG DATA WORKSHOP
IDENTIFY WHERE AND HOW TO START / LEVERAGE BIG DATA ANALYTICS

1. Align business and IT goals around big data
2. Identify strategic opportunities for big data analytics
3. Review current environment and identify data sources
4. Prioritize key use cases by assessing feasibility and ROI
5. Recommend the appropriate analytics engagement and big data deployment roadmap

Workshop Objectives
### BIG DATA ANALYTICS WORKSHOP AGENDA

<table>
<thead>
<tr>
<th>Subject</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>Workshop Objective</td>
<td>To understand the key business initiatives and requirements for big data in order to understand where and how to start the big data journey</td>
</tr>
<tr>
<td>Workshop Duration</td>
<td>Half Day @ Customer site</td>
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</table>
| Workshop Agenda               | 1) Business & IT Goals  
                                   2) Business Initiatives  
                                   3) Business & IT Pain Points  
                                   4) Current Environment Review  
                                   5) Use Cases  
                                   6) Data Sources Review / Model Requirements  
                                   7) Data Science / Analytics / BI Requirements |
| Recommended types of participants: | IT and Business Heads / Users |
| Expected Outcomes             | 1) List of business opportunities and use cases  
                                   2) Business Value and Feasibility  
                                   3) Identify and prioritize data sources mapped with use cases  
                                   4) Prioritized used cases with potential business value and impediments  
                                   5) Document workshop results  
                                   6) Big Data Technology Roadmap with clear next steps |
| Next Step After Workshop      | Proof of Value (POV) or Proof of Technology (POT)                                                                                     |
| EMC Workshop Team             | Head of Big Data Practice SEA, Head of Consulting SEA, Dell EMC Account / Sales Manager                                             |
WHY DELL EMC?

• DELL EMC’s unique solutioning approach to Big Data Analytics allows organizations to start small and build big data capabilities use case by use case.

• Our business-centric, technology-neutral, organizational alignment process that ensures that Business and IT stakeholders are working towards the same goals.

• Our big data vision workshop & 3 step process uncovers use cases that can deliver measureable business value in 90 days.
THANK YOU