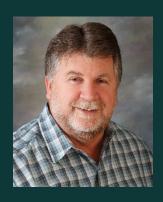


### Tap Into the Potential of Your Data

October 7, 2021

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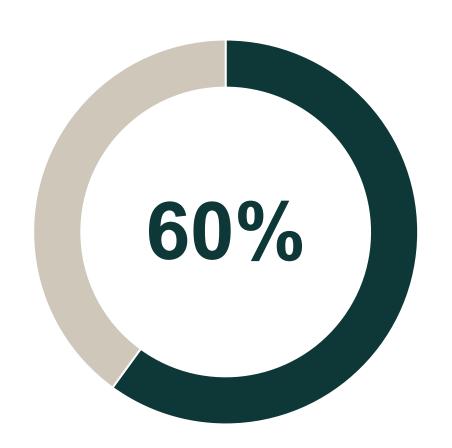
### Agenda

- 01 DATA DRIVEN DECISION MAKING
- ()2 AUTOMATION OF REPORTING PROCESSES
- 03 KEY PERFORMANCE INDICATOR (KPI) MONITORING



### Data Driven Decision Making





### "Nearly 60% of small to medium sized businesses rarely or never look at their data"

- Statistic Brain Research Institute



### Spreadsheet vs. Data Analytics

	SPREADSHEET	DATA ANALYTICS
PLANNING SPEED Rapid scenario planning for agility	-	+
DATA MANAGEMENT  More analytical time and less data wrangling	-	+
DRILL DOWN INSIGHTS Fast insights for "analytical flow"	-	+
ORGANIZATIONAL ALIGNMENT Single source of truth	-	+



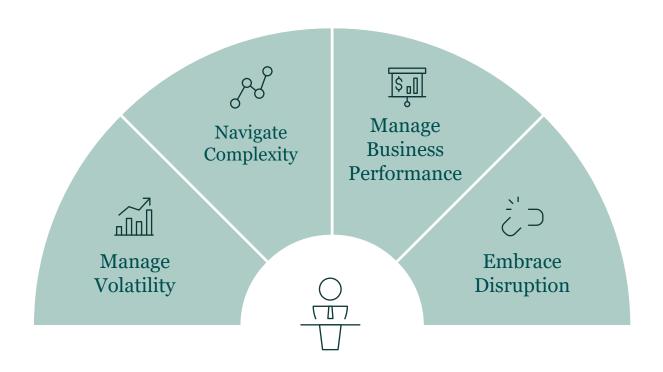
## POLLING QUESTION #1

Are your current analytics providing insights that you need to help manage your business?

- A. Yes, we use robust analytics
- B. Moderately, there's a desire for more insights
- C. Very little, a few charts on executive reports highlight past performance
- D. No, just use spreadsheets and tabular reporting



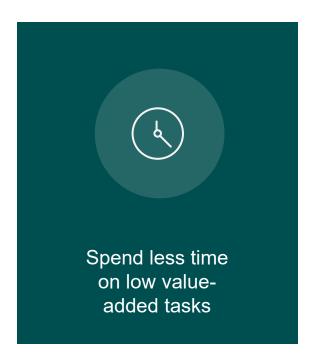
### Recognize Trends Quickly to Stay Ahead





### Executives Need an Engaged Organization

#### Focus on solutions that are strategic to the business

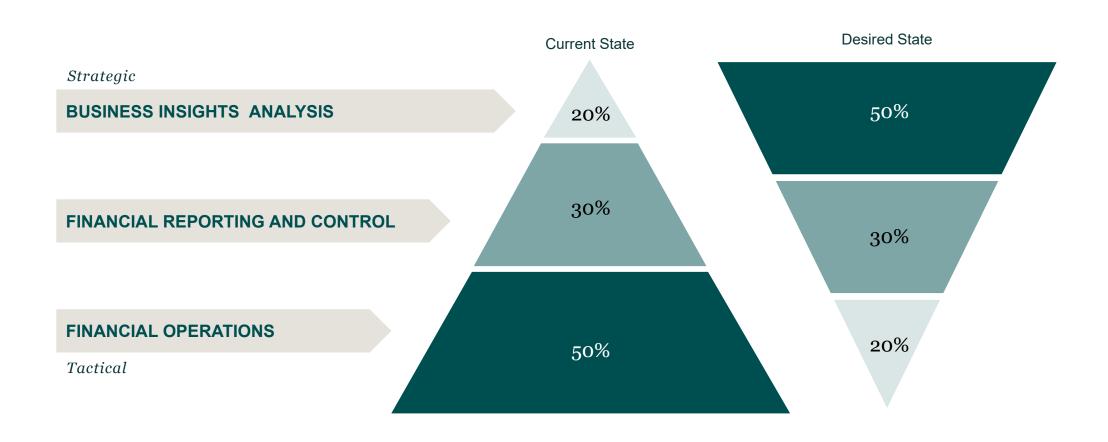








### Focus on Higher Value Activities





### Becoming a Data-Driven Organization: Stages

	HEAVY LIFTING STAGE	EMERGENT STAGE	OPTIMIZED STAGE
State	<ul> <li>Independent platforms supporting the business function</li> <li>Heavy reliance on spreadsheets</li> </ul>	<ul> <li>Compiling multiple information sources to powerful analytic dashboards</li> <li>Data Warehouse</li> <li>Optimized Spreadsheets</li> <li>Automated Reports</li> </ul>	<ul><li>Self Service Analytics</li><li>Predictive Analytics</li><li>Forecasting</li><li>Augmented Forecast Modelling</li></ul>
Impact/ Result	<ul><li>Inefficient</li><li>Error Prone</li><li>Opportunity Cost</li><li>High Risk</li></ul>	<ul><li>Expanding Data Culture</li><li>Defining Data Collection</li><li>Quality Criteria</li><li>Enable Data-Driven Decisions</li></ul>	<ul><li>What-if Scenarios</li><li>People Management</li><li>Resource Management</li><li>Enhanced Return on Investment</li></ul>
Steps Forward	<ul><li>Organization Assessment:</li><li>Data Culture</li><li>Data Infrastructure</li><li>High Value Opportunities</li></ul>	<ul> <li>Implementation:</li> <li>Cloud Data Solutions &amp; Tools</li> <li>Mobile Email/Report Availability</li> <li>Dashboard</li> <li>Self-serve Analytics</li> </ul>	<ul><li>Continuous Improvement:</li><li>Iterative Update Loops</li><li>Ability to Exclude Noise</li></ul>



## POLLING QUESTION #2

What stage of becoming a data driven organization do you believe your organization is in currently?

- A. Heavy lifting stage
- B. Emergent stage
- C. Optimized stage



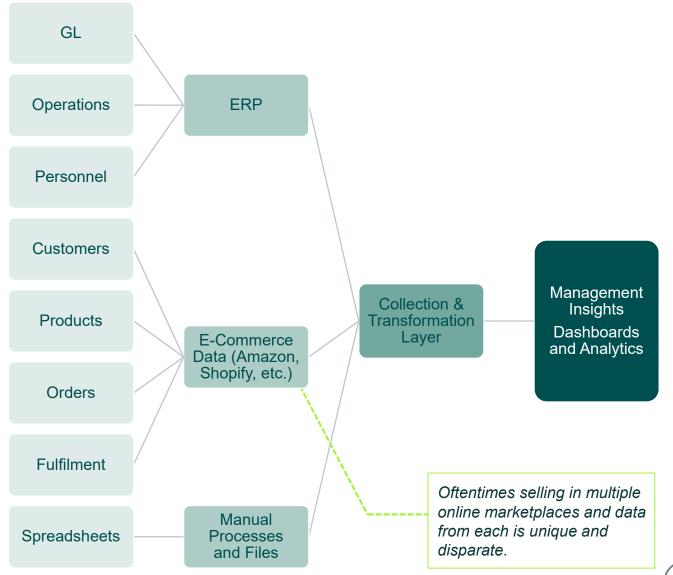
### Automation of Reporting Processes

### Management Insights

Combining Relevant Data In One Place

- See Changes
- Gain Insights
- Make Decisions

Faster – Clearer – Consistent

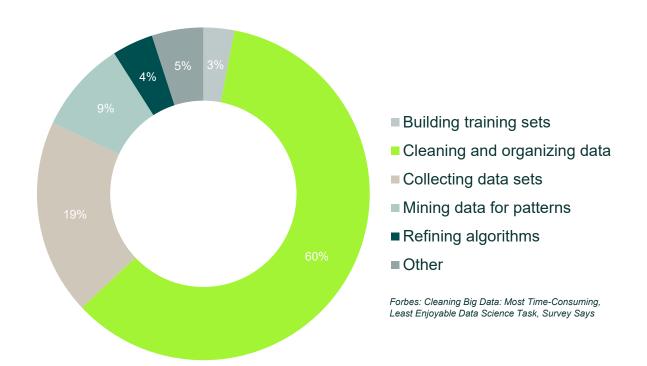


### Manual Processes Breakdown

APA systems are valuable for data prep and the blending of data sources, which is what takes up most data scientists' time. Similarly, multiple departments and knowledge users also face these types of problems when collecting and representing data.

While data automation provides an easy way for employees to convert large or complex files into a digestible format, it also reduces manual errors. By removing that barrier to data collection and combination, your company can get results, and higher ROI, faster.

#### WHAT DATA SCIENTIST SPEND THE MOST TIME DOING





### Analytic Process Automation (APA)

BENEFIT	RETURN ON INVESTMENT (ROI)
Automate high value, error prone, processes.	Reduce time invested in manual processes, often occurring during capacity constrained time periods.
During automation, create rich datasets blended for targeted insight.	Create datasets that can be built upon for additional reporting needs, extract complementary insight to increase overall value of the process.
Train models and dynamic reporting to leverage ML and more.	Automate one of the costliest elements of implementing ML/Al solutions as the gathering, blending, cleaning and preparation is completed.



### You May Benefit from APA if...



You have complicated periodic (annual, monthly, weekly) processes that requires creating a 'big spreadsheet'



You want to be more 'data driven' but are finding the learning curve is steep and the foundation needs improvement



Your processes are maintained or done by a limited number of individuals and there is a risk that the process would be difficult to reproduce in the event of a staffing change



You want to 'free up' time for employees who are wrangling excel sheets



You want to complete time-intensive analysis more frequently and efficiently without having to adjust head count

If you already have an APA tool (Alteryx, UiPath, etc.), our team can help you with enablement, implementation, and kick starting the ROI

Otherwise, we can help you develop and run a new solution that we build and produce specifically for you.

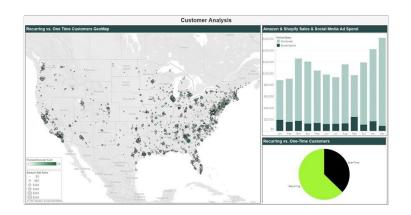


### Visual Analytics

Visual analytics derived from existing legacy systems helps to rapidly frame context and make decisions

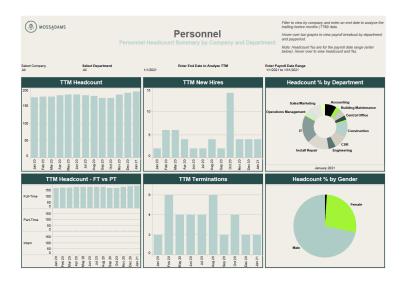
#### **Customer Dashboard**

Summarized reports to track customer specific data (new customer, returning customer, customer location, etc.)



#### **Personnel Dashboard**

Quick overview of several personnel-related metrics (headcount, hours worked, and payroll amounts) with the ability to easily view by department and project into the future.

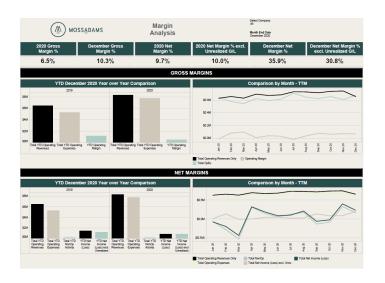




# Visual Analytics (cont.)

#### **KPI Dashboard**

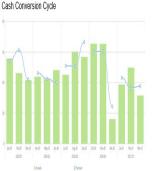
Highlights important KPIs (ROA, ROI, margins, etc.) with comparisons to prior month and year to date with detailed calculations and inputs. Balance sheet and income statement performance trends and analyses tracked on other dashboards.



#### **Cash Flow Dashboard**

Visual cash flow communicates quickly. Free cash flow provides keen insights to business health. Rolling 12-month view gives higher level perspective.





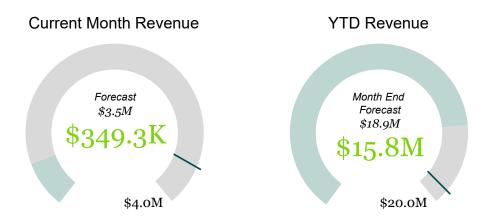


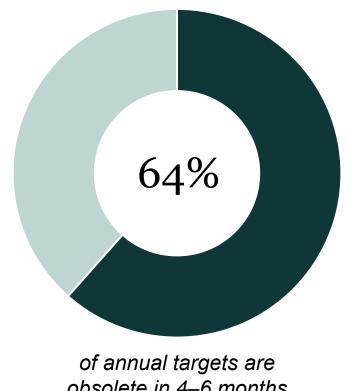
# Key Performance Indicator (KPI) Monitoring

### High Visibility Grows Credibility

#### FINANCIAL ANALYTICS ARE A GUIDE

- Align trends and planning
- Frequent information updates illuminate business drivers
- Facilitate insightful communication





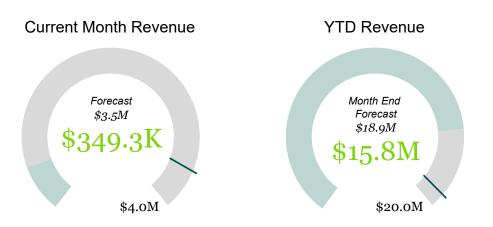
obsolete in 4-6 months



### Comparative Timeframes are Powerful

#### SIDE-BY-SIDE VISUALS FOR DECISION MAKING

- Opens conversations regarding reasonable expectations
- Provides multiple data points to shape perspectives







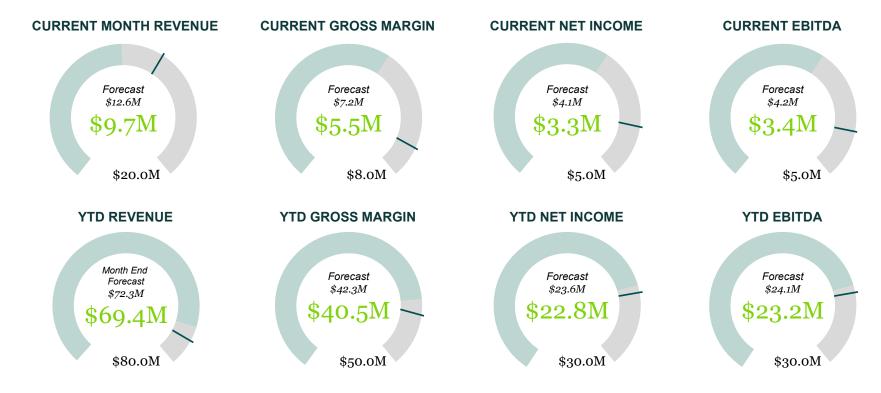






### Key Metrics with Predictive Forecasts

- Provide multiple key answers in one view
- Draw decision makers deeper into data-driven actions





# POLLING QUESTION #3

How much of your business today involves using data to predict future outcomes?

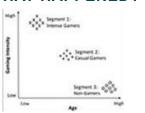
- A. None, we mostly use "gut-checks" and experience to drive decisions
- B. Limited, we occasionally use data on an ad-hoc basis for forecasting
- C. Basic, we have standard forecast templates that are refreshed periodically
- D. Advanced, we use advanced forecasting tools that can predict optimum paths to achieve business goals



### Analytics Spectrum

#### Descriptive

#### WHAT HAPPENED?



Descriptive Statistics
+
Data Clustering
+

**Business Intelligence** 

#### Diagnostic

#### WHY DID IT HAPPEN?

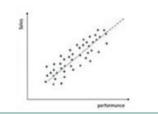


Business Intelligence

+
Sensitivity Analysis
+
Design of Experiments

#### Predictive

#### WHEN WILL IT HAPPEN?



Linear & Logistic
Regression
+
Neural Networks
+
Support Vector Machines

#### Prescriptive

#### WHAT SHOULD I DO?



Simulation e.g. Monte Carlo

Optimization
e.g. linear/nonlinear
programming

low

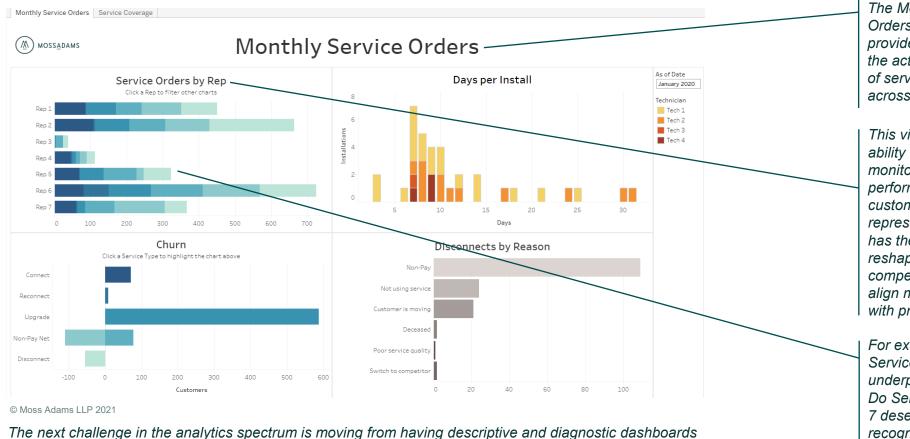
**ANALYTICAL SOPHISTICATION** 

high

#### **DATA MANAGEMENT**



### Monthly Service Orders



to being able to predictively identify WHEN something will happen and WHAT should be done to address it.

The Monthly Service Orders dashboard provides insights into the activity and nature of service orders across employees

This visual provides ability to effortlessly monitor the performance of customer service representatives and has the potential to reshape compensation to align more closely with productivity.

For example, are Service Reps 3 and 4 underperforming? Do Service Reps 6 and 7 deserve additional recognition/compensati on?



### Data-Driven Organization: Action Planning

"Your business is unique, and you can't buy unique advantage off the shelf."

- 'Breaking Down Data Silos' by Edd Wilder-James

### Understand Your Current State

The pace at which your organization adopts a data-driven approach is dependent on many factors. There is always room to be more data driven, but where you are now will determine the best next step.

Before taking the next step, invest in assessing where you are in every pillar and phase.

#### **QUESTIONS TO ASK:**

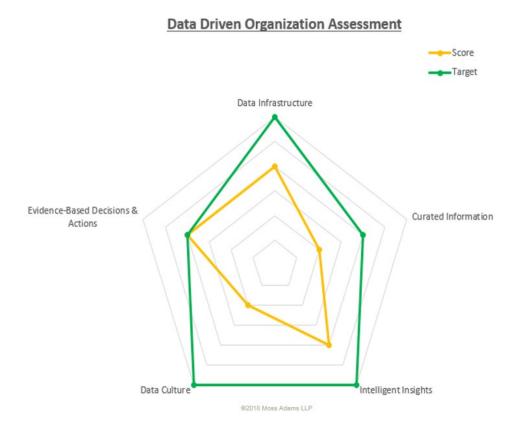
- What systems do I have and do they "talk" to each other?
- Do all of my business units understand common data points and their definitions?
- How "on board" is leadership with creating a data-driven culture?
- How prevalent is the practice of making decisions based on "gut" feeling?
- What is my organization's appetite and budget for implementing new data-driven processes?
- How are we currently measuring success and monitoring performance?
- Is data ownership clear and are data sources of truth universally defined?
- What is my organization's appetite and budget for implementing new data-driven processes?



### **Identify Your Opportunities**

#### THINGS TO CONSIDER

- Gather input from stakeholders and end users on changes that will have the most impact.
- Results drive adoption. Identify "low hanging fruit" data projects with high impact to maximize ROI.
- Set goals and monitor them with measurable metrics.
- Research your options. There are a wide variety
  of tools and applications that serve the same
  functions and are best suited for individual
  organizations and industries.
- Don't rely on an off-the-shelf implementation.
   Make sure you gather requirements and customize any tools you implement to work best for your organization before rolling them out.





# Make a Plan and Execute

Once you've identified your opportunities, lay out a plan to execute on them. The speed of implementation is entirely dependent on the unique characteristics of your organization.

#### THINGS TO CONSIDER:

- Prioritize opportunities that enable more opportunities.
   Identify your critical path.
- Establish a steering committee responsible for holding stakeholders and executors accountable to goals.
- Integrate data into your plan by gathering data to monitor progress and enable change agility for unforeseen roadblocks.
- Consider rewards for exceeding goals and incentives for adoption.
- Practice what you preach. If you lead a data-driven initiative, be sure to show that you are data-driven in your approach to business.



### Business Analytics Drive Value and Agility



Be Responsive
ONGOING INSIGHTS
DRIVE AWARENESS

To quickly respond to change and innovate fast, you need the ability to plan continuously and in real time.



Be Adaptable
BUILD A FLUID
ORGANIZATION

Leading companies build flexible structures and processes and can pivot quickly in the face of change.



Be Collaborative CREATE THE FUTURE TOGETHER

Developing strong business and financial insights for your leadership teams can allow you to plan with confidence.



Be Empowered
EQUIP EMPLOYEES
WITH INFORMATION

Staying agile means giving your people the tools and data they need to take decisive action.



Be In Control CHANGE COURSE ON THE FLY

Part of staying agile means accurately measuring performance to drive results, while being able to pivot if necessary.





"Without data, you're just another person with an opinion."

– W. Edwards Deming



### E-commerce Series: Up Next



#### CYBERSECURITY BEST PRACTICES FOR E-COMMERCE BUSINESSES

October 13, 2021 at 10AM



# > QUESTIONS

Let's start a conversation.

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