DISTRIBUTOR'S GUIDE TO
Analytics

CONTENTS

Introduction

Analytics has evolved rapidly in wholesale distribution channels, fueled in part by the explosion of technology innovation over the past several years, but also as a part of the industry's natural lifecycle. Companies that keep building their analytic capability are staying ahead of the recent waves of disruption.

The following chart provides a useful way to think about how fully a company is leveraging analytics across its three primary functions. It is widely used (and argued about) by many analytics professionals and attributed to IBM. And it is a good guidepost for thinking about how to nurture an analytics culture in your organization.

Defining Analytics

DESCRIPTIVE	PREDICTIVE	PRESCRIPTIVE
What happened?	What is likely to happen?	What should we do?
• Reporting • Dashboards • Scorecards • Segmentation • Clustering	• Data mining • Modeling • Forecasting	• Optimization • Simulation • Big data analysis

Lower	**COMPLEXITY & VALUE**	Higher
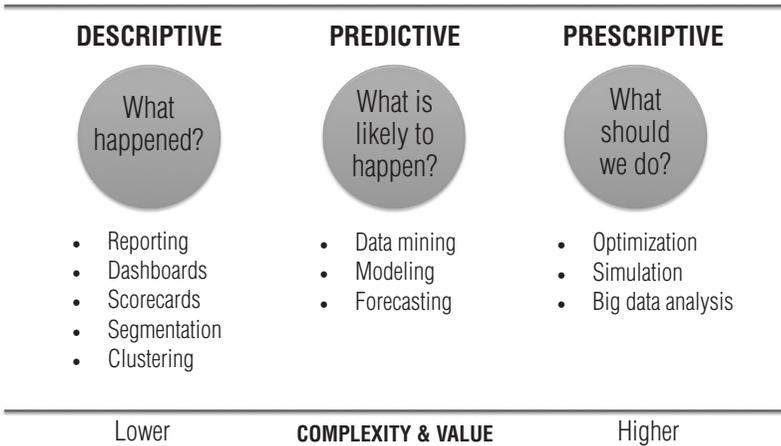
Descriptive analytics are what most distributors live and breathe – ERP exports, Excel analysis, dashboards to slightly deeper comparative tools that give visibility into what the data say happened or is happening.

Predictive analytics can't tell the future, but can combine historic data with some modeling to forecast a future state or likely outcome. Data mining can build correlations between datasets. Example: Based on your sales history of widgets into Toledo, it's possible to profile other markets or similar types of customers. Combining data from transaction history to identify likely cross-selling opportunities is another example.

Prescriptive analytics typically build on the first two levels of analytics to suggest a course of action based on why something is happening. Traditional examples include inventory optimization, pricing and profitability analysis. This is also the playground of big data. More complex models can create scenarios or alternate outcomes from larger and in some cases more unstructured data sources, such as online digital content, video, social media.

Where is your company on the spectrum of analytics adoption and thinking?

Over the past 25 years, I have had the privilege to work with and learn from some of the leading analytic thinkers in distribution, including those who generously share their knowledge in these pages. Our contributing authors have been applying analytics to solve business problems, identify opportunities and improve performance for thousands of distributors globally. Collectively, that's quite an asset, and one we have attempted to digest into a readable and easy-to-understand guide to help you think differently and analytically about transforming your company into a higher-performance one.

The strategic role of analytics and analytic thinking is changing rapidly in every industry and sector of our society, including wholesale distribution, for a single very good reason – better decision making. Companies find there is a huge return on investment in building a capability and culture based on analytic thinking. Our research indicates a widening strategic gap between distribution companies that increasingly make fact-based and data-derived decisions and those that don't.

But we still have a long way to go. In a survey conducted by Modern Distribution Management in 2013, just 12 percent of respondents said they relied on analytics for all of their sales, marketing and operational decisions. More than a third in the survey said their executives don't understand or support the use of analytics. Or they don't know where to begin.

I urge you to consider analytics capability as a strategic imperative if you aren't already, and to use the concepts collected in this book to build a vision for how to build that going forward.

I'd like to share a final thought to dispel one of the biggest myths about analytics before you dig into the insights here. Analytics is often regarded as a purely quantitative discipline, all about spreadsheets, pivot tables, statistics and algorithms. Nothing could be further from the truth.

Executives often bow too quickly to the data, without fully challenging assumptions. There is a great deal of creative thinking and qualitative evaluation that has to go into quantitative analysis for it to be successful. This is most evident in framing the analysis, determining specific questions to be answered, and selecting the appropriate methodology.

The best decision-making I have witnessed beautifully combines quantitative analysis with the intuitive knowledge about markets, competitors, customer behavior and other variables that only years of experience can create. That perspective is invaluable and it is practiced by the top market leaders in every sector of distribution, regardless of size.

I think this last point is critical to keep in mind as you read this book. Reading it won't make you an expert analyst, but it will give you the ingredients to assess and benchmark your current analytic capabilities, find some quick hits with big impact, and to start building your analytics road map and priorities.

How to Use this Book

This book is intended as a tool set, where each chapter can be used individually to improve different parts of your business. But it is also organized to give you a broader view of how and where to integrate business analytics.

You will find often complimentary, sometimes overlapping and occasionally contradictory points of view, all meant to deepen and broaden your ability to deploy analytics. That's intentional! There is no single right answer. We think you will come away with a well-rounded overview of what leading wholesale distribution companies are doing to build a significant gap between themselves and their competitors.

Share this book with your management team. It can get your team thinking about and discussing the best application of analytics for the highest return for your particular business circumstance. Assign a chapter as the basis for a meeting to discuss next steps.

Use the self-assessment tools in the final chapter to evaluate where on the analytics spectrum your team is currently, and to measure how to build priorities.

By reading this book, you will gain a better understanding of specific analytic techniques in distribution businesses today and how they are used. When you are ready to launch an analytics project, either internally or contracted, you will already know what and where the opportunities for projects are, and how to prioritize them. If you are already performing some of the analytics described here, we hope this book will give you fresh ideas and approaches for current and future projects.

Good luck and safe journey!

Thomas P. Gale

Chapter 1

Profit Analytics:
Choose the Right Variables to Measure

Dr. Albert D. Bates, Profit Planning Group

Perfection in business might be unattainable, but distributors can differentiate themselves from competitors and improve profit through thoughtful, careful analysis. Knowing which variables to measure can be a difficult process to begin, so this chapter presents the critical profit values – sales size, sales growth, gross margin percentage, operating expense percentage, days sales outstanding and inventory turnover – that will increase efficiency and improve profitability. Developing the right plan that balances these CPVs and having a management team in place that is willing to implement this plan through operational excellence and cost control will soon generate a higher profit.

To be better than the competition, the obvious approach for a distributor is doing everything better than its competitors. That is easier said than done. Actually, it is close to impossible. Of the 885 firms included in my recent research, nine had a perfect score on managing all the critical profit variables better than the typical firm in their lines of trade. The reward of doing so is high – these firms returned a profit before taxes that was, on average, 128.6 percent higher than typical – but only 1 percent of the firms could achieve it.

Even if distributors try to achieve perfection, they are unlikely to reach it. Every company has a tendency to emphasize some part of the business more than others. Some firms have a sales orientation, others emphasize asset control. This simply reflects the different perspectives of different management teams.

Chapter 2

Profit Analytics:
Develop and Use Profit Analytics

Randy MacLean, WayPoint Analytics

Analytics-driven operations can deliver staggering profit gains, but it takes a visionary leader to direct any kind of data initiative – a leader who won't accept a company's limited analytical expertise and will instead tackle this need head on. In this chapter, distributors will learn how to shift from a revenue-share mindset to a profit-share mindset by zeroing in on three key metrics – gross profit, cost to serve and net before compensation. It also outlines how the concepts of line-time profit analytics and quantum costing can create an effective analytics environment.

The pursuit of profit gains and the optimization of profit production have been business priorities since the dawn of commerce. Advances in computing technology and the pressures of an increasingly competitive marketplace have brought the need for profit analytics to a fever pitch.

Just a few years ago, pioneering executives used what were then state-of-the-art spreadsheets, with hundreds of calculations that delivered insights into the profit-driving elements of their business.

With the advent of today's line-item profit analytics (LIPA) systems, companies can simultaneously use hundreds, thousands or even tens of thousands of factors – through hundreds of millions or billions of calculations – to compute profitability on every line of every invoice.

This has contributed enormously to the science of profit dynamics and

Chapter 3

Market Analytics:
Mine the Gap: World-Class Market Analytics

Thomas P. Gale, MDM Analytics

Market analytics is the combined effort to analyze data about customers, geographic markets and the competitive dynamics that impact the markets. Top-performing companies use market analytics to gain better visibility into addressable market size, market share and wallet share at target accounts. They deploy a more effective sales and marketing process and make better decisions about growth strategy based on market data analysis. This chapter is a primer on the core elements of market analytics – segmentation, profiling and modeling – that can help your company grow faster and be more adaptive than competitors.

How do you rate your sales and marketing organization – against direct competitors, marketing group peers or best-in-class companies and industries you admire? Do any of the following ring true?

- **Data-free discussion**: We repeatedly talk about market share and whether we are getting as much as we can out of specific accounts in sales, marketing and management meetings, often with no actionable result.
- **Shotgun selling**: Our salespeople have too many accounts and a diluted focus that too often causes a presentation spray-paint approach. They also spend too much time selling to existing customers without a clear agenda.
- Sales silos: Our salespeople hold knowledge about their

Chapter 4

Market Access Analytics:
Use Data to Deploy Sales & Marketing Effectively

Steve Deist, Indian River Consulting Group

Devoting resources to analytics can be a difficult decision because it might mean taking money away from your company's traditional sales force. This chapter will help you navigate that decision and put it into action by underscoring the impact that data can have on a company when it deploys the sales team more effectively and properly aligns resources with market opportunities.

"It's easy to make money in Excel." With these words my colleague Mike Emerson nicely captured the common disconnect between data models and reality. Numeric analysis is a starting point, but it's not an end in itself. A good modelling tool can help us see the impact of raising margins on "loser" customers by a point or getting our fair share of an underdeveloped market, but what it can't do is show us how to actually accomplish those things. That's because numbers don't add up to a plan.

For distributors, the "how to" plan will inevitably involve the sales force, which is usually the biggest single expense category and the most powerful competitive weapon – indeed, the heart of most distributor organizations. This chapter is about translating analytics into action on the front lines of sales and marketing.

Over the past 10 years or so, most distributors have become more data driven and strategic in how they manage their sales resources. There

Chapter 5

Marketing Analytics:
Customer Profiling for Distributors

Jonathan Bein, Ph.D., Real Results Marketing

Analytics can help you profile your customer base and determine which ones are most profitable for your business. This chapter outlines the methods for finding the sweetest spots in your customer base and for managing the entire lifecycle of the customer relationship.

In my experience, distributors routinely have difficulty answering the following two questions:

1. What are the sweetest spots in our customer base?
2. How should we manage the customer lifecycle from first purchase to maturity and beyond?

They may think they have the answers, but often it is based on gut feel or anecdotes. There's no data to back them up. And often, that gut feel is incorrect or, at best, partially incorrect. As a result, distributors may be spending too much effort on some customers while ignoring great opportunities.

The Sweet Spot Problem

When we ask successful distribution executives about the sweet spots in their market, they readily provide a confident answer. But a detailed,

Chapter 6

Sales Analytics:
Focus on the Front End

Brian Gardner, SalesProcess360

Most companies devote time and resources to the back end, the quote and order phases, as opposed to the front end, the lead and opportunity phases. Determining how well your company performs in each phase can identify sales strengths and weaknesses. This, in turn, leads to opportunities for improving sales and maximizing profit.

In the past 30 years of being in the industrial sales world, I have found that most companies manage their businesses from what I call the "back end" of the sales cycle. But shifting the focus to the front end of the sales cycle can have significant value and reward.

At the beginning of my industrial sales career, I, too, was guilty of managing from the back end.

I started in the industrial sales market within a family process control and instrumentation business in the 80s. I had worked through all facets of the business, from sweeping floors, stocking shelves and inside sales to my first outside sales position of calling on C&D accounts (cats and dogs).

When I started in sales, my training was: "Here are your accounts, here is what we sell, and good luck." There was no process to follow or road map to give direction on where to spend my time. The only thing I had

Chapter 7

Pricing Analytics:
Analytics for Distributor Pricing & Cost to Serve

Brent Grover, Evergreen Consulting, LLC

The right pricing strategy is critical for a distributor that wants to remain competitive, but too many companies take the wrong approach to pricing, usually focusing simply on gross margin, volume or whatever the market will bear. This chapter shows the importance of taking away the pricing latitude typically given to sales reps and instead applying analytics to devise the right price.

Does your distribution business have a pricing strategy? If so, it might be based on one of these approaches:

- Pricing somewhat above competition due to superior value proposition (focus on profit)
- Pricing somewhat below competition to leverage lower operating costs (focus on volume or share)
- Pricing at whatever market will bear

Each of these examples requires some knowledge of the market prices for the products you sell. But how do you know what those market prices really are? Applying pricing analytics to your pricing strategy can help make this determination.

Pricing analytics is a systematic series of basic computations of your 12 most recent months of customer transactions on a line-item level – a

Chapter 8

Inventory Management Analytics:
Maximize Productivity & Profitability

Jon Schreibfeder, Effective Inventory Management

Analytics can help your company see where it is meeting or falling short of customer expectations and how it can most effectively manage inventory. Incorporating metrics into your business plan will streamline inventory, maintain the right products on hand at the right time, keep customers happy and – most importantly – maximize productivity and profitability.

The goal of effective inventory management is to meet or exceed customers' expectations of product availability with the amount of each item that will maximize your next profits. Several metrics can help monitor your progress in achieving this goal:

- Customer service level
- Monitoring stockouts
- Inventory turnover
- Turn/Earn (T/E) Index
- Gross margin return on investment (GMROI)
- Three-way ranking
- Percentage of excess inventory

Customer Service Level

The customer service level measures how often you have the items you've committed to stock when your customers want them. If you

Chapter 9

Next Steps:
Build Your Analytics Capability

Thomas P. Gale, MDM Analytics

Our intention with this book was twofold. First, we wanted to provide a snapshot of how and where leading distribution companies in 2015 are applying analytics to improve their bottom lines. We hope one or more of these chapters resonated as a specific area to strengthen a weakness, capitalize on opportunity or improve financial and operational performance. Specific analytic projects can yield quick and meaningful impacts, as well as evergreen returns for a company.

Second, we hope this collection of some of the best analytic thinking in distribution motivates you to increase analytics capability within your organization to build a stronger decision making process. Our contributing authors are passionate about the outcomes they have seen in companies that increase analytics capabilities. You can transform your business into a higher performance company by implementing the analytical best practices outlined here.

You can bring in consultants or hired-gun data specialists for one-off or high-priority projects, but the rapidly shifting competitive landscape in distribution requires that every company develop an analytics champion. The job description will vary widely, but every distribution company must cultivate skills and experience in the more effective use

About Gale Media, Inc

Gale Media is a market-leading information services and publishing company. Its two business units – Modern Distribution Management and MDM Analytics (formerly Industrial Market Information) – provide knowledge products and services to professionals in industrial product and wholesale distribution markets.

Since 1967, MDM has been the definitive resource for distribution management best practices, competitive intelligence and market trends through its twice-monthly newsletter, market intelligence reports, books and conferences.

MDM Analytics provides proprietary market research and analytic services to profile market share and account potential for industrial products.

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