



# The Analytic Hospitality Executive

Implementing **Data Analytics**  
in **Hotels** and **Casinos**

**KELLY A. McGUIRE**

Foreword by Dexter E. Wood Jr.

**WILEY**

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in Hotels and Casinos*

**Kelly A. McGuire, PhD**

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*To my favorite analytic hospitality executives*



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# Foreword

Data, it has often been claimed over the past several years, is the new oil. I'm not convinced this is entirely true, but there are some curious similarities. Just as oil slumbered as an unappreciated resource until the late nineteenth century and then awakened wholesale changes to the world economy, data in many ways has the potential to do the same. But in contrast to oil that sat beneath the earth for thousands of years relatively undetected, data is flooding all around us in seemingly unmanageable variety and volume. Data is everywhere, but perplexingly the more we have of it, the more it becomes increasingly difficult to harness and exploit.

This is particularly true in the hospitality industry where our culture has been historically high touch and low tech. Yet, every hour of every day hotels, restaurants, and casinos generate millions of data points as customers interact with reservation systems, loyalty programs, credit card exchanges, point of sale systems, and simply check in and out of hotels. Although the traditional success of most hospitality companies has largely been due to their ability to use customer service, facilities, and location as differentiators, this is no longer enough.

Today, our service-driven industry has become extremely competitive in almost every way conceivable. For small and large companies alike, there has never been a time with more focus on performance—financial performance, stock price, customer loyalty, market share, you name it. The competitive landscape has quickly transitioned to finding a way to best use data to drive strategy and performance.

As a hospitality industry executive and consultant for almost 30 years, I have witnessed this transition firsthand and I can appreciate what a challenging journey it has been and continues to be for many of us. Although I have enjoyed some success over the years helping to drive the adoption of data-driven decision making and performance enhancement during my time with Pricewaterhousecoopers, Host Hotels & Resorts, and now Hilton Worldwide, I really wish Kelly McGuire could have helped me out and published *The Analytic Hospitality*

*Executive* 25 years earlier. As you will soon realize when reading her book, Kelly serves up a brilliant recipe for understanding all of the key principals in a readable and business-faced format. If you are thinking about becoming a better analytic hospitality executive, then this is your guidebook.

I first met Kelly when I joined the advisory board for the Center for Hospitality Research at Cornell University's School of Hotel Administration. We are both alumni; she with a master's degree and a PhD, and I with an undergrad degree many years earlier. What impressed me about Kelly when we first met was that I immediately recognized her as an "hotelier." Not solely an academic mind, she had that rare combination of technical intelligence matched with a keen appreciation for the business of hospitality. It's actually easy to see how she came up with *The Analytic Hospitality Executive* because that is who she is. I know her to be an analytics evangelist who is passionate about helping the hospitality and travel industries realize the value of data-driven decision making.

In this book, Kelly McGuire masterfully articulates the keys for successfully building a strategic analytical culture in your hospitality organization. She will emphasize the absolute necessity for senior executive-level buy-in and support. Additionally, she will stress the need for an organizational commitment to fact-based decision making and the allocation of the right business resources. Not just dollars allocated to technology, but the dedication of the business to transition to an actionable data-driven decision-making process. The days of devoting 80 to 90 percent of resources to data collection and validation need to come to an end.

There is no message that resonates more strongly from Kelly's book than that it's all about the data. If you learn nothing else from this book and the real-life stories depicted within, please take one word of advice from those of us who have walked the path. Start with the data.

As Kelly explains in this book, data is often not the sexy part of analytics. The potentially rich data trapped in fragmented legacy systems like those prevalent in the hospitality industry are plagued with challenges. The possible solutions often lack clear ownership and funding as other priorities jump to the front of the line. In my view, this is always shortsighted as getting the data right is perhaps the most important building block for success.

Much like my golf game, it's always more appealing to find a short-cut. Hard work and practice are no fun for most of us. Every year there is new driver technology that promises to let us all hit it right down the middle and 50 yards further. Why take lessons and practice when you can just buy new technology? Of course that strategy continues to disappoint in lowering my handicap.

Similarly, many executives are often too eager to embrace the popular new technology and the vernacular of the day. Lately, big data seems to be the magic term that gets everyone excited. As Kelly will explain, today's big data is tomorrow's small data. It's not just science; there is a lot of art as well. Being too quick to buy a shortcut solution and rush to fancy dashboards without focusing on the underlying data and organizational alignment almost always lead to failure.

In my experience, and as Kelly describes in this book, data is the key to the successful creation of a strategic analytical culture. It's the business taking ownership and demanding a "single source of truth." It's the commitment to establishing a common business language and what Kelly describes as a sound and sustainable data management strategy.

In this amazing book, Kelly McGuire will provide a tool kit to help all of us navigate the path to a strategic analytical culture in our organizations. She understands the challenges hospitality companies are facing in these highly competitive times. Strategically leveraging data has never been more important. We all need to be better analytic hospitality executives. In that regard, this book is essential.

Dexter E. Wood, Jr.  
SVP, Global Head, Business & Investment Analysis  
Hilton Worldwide

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# Acknowledgments

The experience of writing this book was very different from writing the first one. Of course, changing jobs and moving right in the middle of the process definitely influenced that. Having this project did add a little bit of stress, but it also helped me through the transition. It was a constant that reminded me of my passions and interests, as I was figuring out what to do with my extra furniture or trying to find a new dry cleaner. Of course, now that it's ready to be published, I suddenly have fewer excuses for not unpacking those last few boxes. . . . As with my first effort, the best thing about the process was that it gave me an excuse to reach out and reconnect with people who inspire me, and who I so very much enjoy speaking with. There is a fantastic community of dedicated analytic hospitality executives out there, and I am humbled and privileged to be a part of it.

I must start out by once again thanking the team at SAS that helped me through this book so soon after the first. My development editor, Brenna Leath, and my marketing support, Cindy Puryear, in particular, have made this process both easy and fun. Thanks for being responsive, even after I left the fold.

I also want to thank my previous boss, Tom Roehm, for pushing me to do this. One book wasn't going to be enough; I had to write two to prove, actually, I can't really remember what I was trying to prove . . . but I'm glad I felt I had to. I must thank my new boss, Jeremy TerBush, for being open to letting me see this through, for his genuine excitement about the project, and for how much fun we have had and will continue to have making a difference for the business, for our stakeholders, and for the careers of the individuals on our team. I have admired Jeremy's dedication, leadership, and achievements from afar for many years. It is an honor to be a part of his team.

A special thanks goes to Dexter Wood, for sharing his experience and his perspective through this process. Conversations with Dex inspired a lot of the thinking that went into the book. He pushed me to challenge the material and myself, and it is much appreciated. Thank

you for authoring the foreword and the case study in Chapter 2, but more important for believing in the value of data analytics, for believing in this project, and for believing in me. And speaking of Big Red Analytic Hospitality Executives, I very much appreciate the genuine enthusiasm and passion that Dave Roberts has for analytics and for revenue management. He has been a great inspiration and a great advocate. Thank you, Dave, for your tireless pursuit of the importance of analytics in hospitality! I also appreciate the support and inspiration from Ted Teng, a consummate #hotelieforlife, whose dedication to advancing the industry and the people in it has been an inspiration to us all.

Many people generously gave their time to this project, and it is much appreciated. My partner in crime, Kristin Rohlf; my other partner in crime, Natalie Osborn; and Alex Dietz, Anne Buff, and Analise Polsky lent me their expertise as technical editors, and the book is much better for it. Dave Roberts, Jeremy TerBush, David Koch, Bernard Ellis, David Turnbull, R. J. Friedlander, Natalie Osborn, Paul van Meerendonk, Kate Kiesling, Fanie Swanepoel, and Andy Swenson took time from their very busy schedules to lend their expertise to lengthy case studies. Michael Smith and Kate Keisling took a panicked phone call at short notice when I realized I was out of my depth. I also very much appreciate the inspiration provided by the analytic hospitality executives who let me quote them, learn from them, and be inspired by them.

Speaking of analytic hospitality executives, two more of my favorites should be personally recognized for their support of me and my efforts. Thank you, Mark Lomanno and Tom Buoy, for sharing your critical and thoughtful perspectives with me and letting me run with them, for your passion for the industry, and for the time you have spent making me and others better at what we do. I also appreciate the encouragement and advice from Gary Cokins, another prolific SAS author, and from Michele Sarkisian, whose passion for all things hospitality is both remarkable and contagious.

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keeping the community together, and of course, Bob Gilbert, who is such a great advocate for our industry.

I am fortunate to have good friends and family who have been with me through this process: In particular, Alex Failmezger and Adam Sternberg, for providing moral support and feedback even through their job changes. My brother, Sean, who told me that my first book “was not a terrible read.” And, of course, my parents, who have supported me through every crazy decision that got me to this point. If anyone is looking for a nontraditional hospitality analytics candidate, my mother is now quite well read and, I think, available—if you offer the right travel benefits.

I learned so much while I was at SAS. This book would not be what it is without that experience. I miss my colleagues and teammates very much. I thought of you often as I was finishing this book. I also want to thank my new team at Wyndham for being so welcoming, so much fun, and, well, so just plain excellent at what you do! Every analytic hospitality executive should be so lucky to have a team like you!

I was extremely humbled by the response to my first book. It is an honor to be a part of this community and to contribute to moving it forward. It has been such a pleasure to present the original research that Breffni Noone and I have worked on to the community and talk through those complicated issues with you. It has been a joy to hear your reactions to the blog that I coauthored with Natalie Osborn, and it has been just genuine fun to stand up in front of you to challenge our thinking and try to make us better. The biggest thank you goes to all of you who have read my work, shared it with your colleagues, assigned it to your students, and talked to me about it. Keep up the great work. We will get there, together.

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## About the Author

**Kelly A. McGuire, PhD**, is Vice President, Advanced Analytics for Wyndham Destination Network. She leads a team of data scientists and developers that builds custom analytic solutions for Wyndham Vacation Rental's companies and the RCI time-share exchange. She is an analytics evangelist, helping hospitality and gaming businesses realize the value of big data and advanced analytics initiatives, to build a culture of fact-based decision making. Prior to joining Wyndham, she led SAS's Hospitality and Travel Global Practice, a team of domain experts in hospitality, gaming, travel, and transportation. Internally at SAS, she was responsible for setting the strategic direction for the practice and defining the industry portfolio and messaging for her industries. Before taking on this role, she was the industry marketing manager for Hospitality and Gaming at SAS. She was responsible for the outbound messaging regarding SAS's Hospitality and Gaming capabilities, particularly in the areas of revenue management and price optimization. She also worked with the joint IDEaS and SAS product management team, where she was responsible for gathering requirements for ancillary revenue management solutions such as function space, spa, and food and beverage. Kelly was also responsible for defining requirements and creating the market strategy for SAS Revenue Management and Price Optimization Analytics, which is the analytics engine for IDEaS G3 Revenue Management System.

Before joining SAS, Kelly consulted with Harrah's Entertainment to develop restaurant revenue management strategies for the casinos in their major markets. Kelly was a senior consultant at Radiant Systems, working with contract food service clients on web-based administrative solutions to manage cash handling, inventory management, supply chain, and labor. She also worked for RMS (Revenue Management Solutions) on menu-item pricing strategies for chain restaurants, and designed a prototype function space revenue management system for the Westin in Singapore. She managed an upscale Creole restaurant in New Orleans, and was the general manager of a franchised Ben & Jerry's Ice Cream Shop in the French Quarter in New Orleans.

Kelly has a BS from Georgetown University and an MMH and a PhD in Revenue Management from the Cornell School of Hotel Administration, where she studied with renowned revenue management researcher Dr. Sherri Kimes. Her dissertation was on the impact of occupied wait time on customer perceptions of the waiting experience. Her research has been published in the *Cornell Hospitality Quarterly*, *Journal of Pricing and Revenue Management*, *Journal of Hospitality and Tourism Research*, and the *Journal of Service Management*. She is also a frequent contributor to industry publications and speaker at industry conferences. Kelly is also the author of *Hotel Pricing in a Social World: Driving Value in the Digital Economy*.



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# Contents

**Foreword** xiii

**Acknowledgments** xvii

**About the Author** xxi

Chapter 1	Building a Strategic Analytic Culture in Hospitality and Gaming	1
	Strategic Analytic Culture	3
	Moving Ahead and Staying Ahead with Prescriptive Decision Making	5
	Making It Happen	9
	Getting Started	13
	How This Book Can Help	15
	Notes	17
Chapter 2	Data Management for Hospitality and Gaming	19
	Data Management Challenge and Opportunity	21
	Data Storage	29
	Data Integration	34
	Data Quality	40
	Measuring the Benefits of Data Management	42
	Responsible Use of Data	43
	Conclusion	51
	Additional Resources	52
	Notes	52
Chapter 3	Data Visualization	53
	Why Are Visualizations So Important?	55
	Visualization Technology	56
	Data Handling	58
	Visualization Types	62
	Creating Powerful Visualizations	67
	Conclusion	79
	Additional Resources	80
	Notes	80