



# HARNESSING DATA ANALYTICS FOR YOUR ORGANIZATION

## *Making Data-Driven Insights*

The Data Revolution is in full swing, transforming everything from our daily lives to how we do business. The world has watched in awe as the organizations that are willing, ready, and able to take on the challenge of harnessing the power of data science to make predictions about their customers, the market, and their organization have stood further and further above their peers. But many organizations are struggling to unleash this power for their organizations; progress is stymied by misunderstanding, poor data strategy, and lack of a common language between teams. The directive to make data-driven decisions flounders as teams struggle to understand the fundamental principles of data science.

SO, WHAT'S THE SOLUTION?

*Harnessing Data Analytics for Your Organization* takes your team from unsure and misinformed to confident, articulate, and eager to move forward into the opportunities that predictive analytics holds for your organization. This Learning Sprint prepares your team to productively engage with industry operations.

### OUTCOMES

- Demystify the data science process.
- Align data and business understanding and develop meaningful solutions to issues such as siloing and mistranslation.
- Develop new ability to communicate with analytics stakeholders.

### YOU WILL

- Develop a highly functional familiarity with key data mining concepts.
- Construct a data proposal that will then be crowd-sourced via Idea Tournament to evaluate, hone, and provide to your organization for implementation.
- Collaborate to unpack your organization's current data strategy and propel your organization into new levels of data maturity.

### ABOUT THE EXPERTS



#### FOSTER PROVOST

- *Professor, Information Systems and Andre Meyer Faculty Fellow at NYU Stern School of Business*
- *Co-author of Data Science for Business*
- *Winner of 2009 INFORMS Design Science award for social network-based marketing, IBM Faculty Awards for outstanding research in data mining and machine learning, and a President's Award from NYNEX Science & Technology*



#### VASANT DHAR

- *Professor at NYU Stern School of Business*
- *Co-Director of the Center for Business Analytics.*
- *Editor in Chief, Big Data journal*
- *Pioneered machine learning for predictive modeling on Wall Street*

## SPRINT OUTLINE (COURSE ALSO AVAILABLE IN 3 WEEK VERSION)

<p><b>WEEK 1</b> INTRODUCTION TO PREDICTIVE ANALYTICS</p>	<p><b>WEEK 2</b> THE DATA MINING PROCESS</p>	<p><b>WEEK 3</b> INTRODUCTION TO MODELING</p>
<ul style="list-style-type: none"> <li>• An Unparalleled Opportunity</li> <li>• Understanding the Target Variable</li> <li>• Asking the Right Question</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to Data Mining</li> <li>• Categorical and Numeric Target Variable</li> <li>• Managing Iteration in Data Preparation</li> </ul>	<ul style="list-style-type: none"> <li>• Demystifying Modeling</li> <li>• Supporting the Modeling Process</li> <li>• Detecting and Avoiding Overfitting</li> </ul>
<p><b>WEEK 4</b> EVALUATING YOUR PREDICTIONS</p>	<p><b>WEEK 5</b> LEVERAGING PREDICTIVE ANALYTICS FOR COMPETITIVE ADVANTAGE</p>	<p><b>WEEK 6</b> IDEA TOURNAMENT</p>
<ul style="list-style-type: none"> <li>• Establishing Baseline Performance</li> <li>• Evaluating Categorical Models</li> <li>• Evaluating Numeric Models</li> <li>• Understanding the Expected Value of Your Data Science Solution</li> </ul>	<ul style="list-style-type: none"> <li>• Deployment: Data Science in the Real World</li> <li>• Bringing a Deeper Understanding to Data Proposals</li> <li>• Partner Review</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate</li> <li>• Conclusion</li> </ul>