CREATE YOUR OWN OPPORTUNITIES. DEFINE YOUR IMPACT.

HIGH ROI DATA SCIENCE

I joined the AI Strategy world in 2015 because I couldn't get past small projects without changes to the business. Transformations are required to support productization, commercialization, and monetization of data and models.

To help Data Professionals deliver high-value projects, firms are investing in upskilling their Data Science teams around:

- Leadership
- Strategy
- Business Acumen
- Ability to Communicate at the Executive Level
- Production Grade Development Capabilities

My courses and seminars on the first four topics have been wildly popular. 39% of companies are investing in reskilling and it's the third largest AI investment area.

IBM's Global AI Adoption Index is insightful. The state of AI adoption lags the hype. The survey reveals some deeper truths about the lopsided implementation of AI across businesses.

IBM breaks AI adoption into 2 categories, % of companies who have deployed AI and % who are exploring AI. Most consultants share a common experience. We are brought in because the firm's Data Science team can deliver models but cannot deliver value. That's the largest challenge businesses face today.

The Need for A Holistic AI Strategy

IBM's survey lists several strategic drivers for AI adoption in their top 10:

- Cost Reduction
- Competitive Pressures
- Customer Needs
- Labor Shortage
- Directives from Leadership/Business Goals

There's a need for a holistic AI Strategy but only 28% of businesses have one in place. 37% are developing an AI Strategy and 25% have an early maturity strategy targeting specific use cases.

I have worked with companies that were stalled in the AI Strategy planning or low maturity AI Strategy phases for years. Most businesses who go it alone, succeed after learning hard lessons from multiple rounds of failure. AI Strategy planning shouldn't take more than 90 days at an SME with an expert advisor or team.

Larger businesses are 60% more likely than smaller companies to have a holistic strategy. In my experience, that's due to their access and experience with outside advisors.

IBM's survey listed the top 5 barriers to AI adoption and a holistic AI Strategy removes each one.

Limited skills, expertise, and knowledge

Access to talent and building a successful internal training program requires alignment across the business. The AI product roadmap or project plan and value stream define the business's need for capabilities holistically. They provide detailed guidance for hiring and upskilling programs.

Price is too high

AI Governance gives senior leadership a framework to manage the value creation side of AI initiatives. The first phase of the AI Governance framework estimates the initiative value using a frontline approach. The second phase assesses the solution's feasibility and costs. Each iteration is a low cost lesson on identifying high value opportunities and minimizing solution costs. Nothing moves forward until there is a plan for the AI Last Mile and returning value to the business.

Projects are too complex or difficult to integrate and scale

Complexity is resolved by the AI Governance framework. Senior leaders manage the value creation without being pulled into managing the technology or workflows. That removes the complexity of oversight. Coordination across the business is a key driver for a holistic AI Strategy vs. a strategy limited to a few groups and use cases.

Lack of tools or platforms to develop models

Once business needs are defined by the AI Strategy artifacts, most firms find the tools and platforms they need to support data, development, and deployment.

Too much data complexity

The Data Monetization Catalog is another artifact of the AI Strategy planning process. The data valuation process reveals which datasets can be used for model training and leveraged to address business challenges. Focusing on the highest value datasets reduces complexity. Data maturity progresses in phases.

A holistic AI Strategy is a critical success factor for deploying AI and generating returns from AI initiatives. There was nothing available for Data Professionals who needed to learn how to create a Holistic AI Strategy, so I built Business Strategy For Data Scientists to fill the gap.

The course outline shows how each section gives students the capabilities and knowledge to address the challenges IBM lists.

Business Strategy For Data Scientists

Enroll at: DataScience.vin

Section 1: Introduction

1. Why Take This Class
2. Moving From Tactical to Strategic Thinking
3. Gaps In Traditional Strategy Approaches
4. How This Class Extends Traditional Strategy
5. Course Updates Explained

Section 2: Business Fundamentals

1. The Business Model
2. Tangible Examples of Business Models
3. The Operating Model
4. The Technology Model
5. Defining Strategy
6. Competitive Analysis
7. The Value Stream
8. Introduction To KPIs
9. Connecting KPIs To Initiatives to Get Buy In
10. KPI Maturity Phases
11. What Is Growth and Where Does It Come From?

Section 3: Strategy Planning

1. Strategy Planning: The Story of Retail's Disruption
2. Building Dominant Strategy Part 1
3. Building Dominant Strategy Part 2
4. Optimizing Strategy Planning

Section 4: Strategy Implementation

1. The Cautionary Tale of Zillow
2. Why Is Transformation So Hard?
3. Getting Buy in From Senior Leadership
4. Collaborating With External Teams
5. Strategy Implementation Framework: The Core-Rim Model
6. Where Do People Fit in The Intelligent Business?
7. The 3 Main People Groups
8. The Implications of Reducing Complexity with Machine Learning

Section 5: Data Science And Strategy

1. Where Do You Fit? The Role of Data Scientist Strategist
2. Becoming A Strategic Partner
3. Decision Support Systems and Improving KPIs
4. The Data Science Value Stream
5. Machine Learning Product Strategy
6. Capabilities Based Competition
7. Exploring Partnerships

Section 6: Assessing the Business

1. Teaching The Business About Itself: Defining Opaque and Transparent
2. Working Backwards from the Customer
3. Assessing Machine Learning Maturity
4. Building A Transformation Roadmap
5. Creating A Needs Based Transformation Timeline
6. Building Internal Support for Transformation

Section 7: Building The Business Case

1. Building A Track Record of Success
2. Budget and Allocation
3. Calculating Returns and Connecting Business Metrics to Model Metrics
4. AI Strategy KPI Library: Justifying Data Science Initiatives with KPIs
5. The AI Strategy Document and Organizational Build Out Plan

Section 8: Data and Analytics Organization Build Out

1. Creating Alignment Between the Business and Build Out Plan
2. Scaling Back If You Don't Get Everything Approved
3. Building A Talent Pipeline
4. Building An Internal Training and Mentorship Program
5. Creating An Organizational Chart and High Level Team Structure
6. Team Structure: Layered Goals and Responsibilities
7. Defining Roles Based on Value Creation and Business Needs

Section 9: AI Governance. A Framework For Senior Leadership To Manage Initiatives

1. The Need for AI Governance: AI's Last Mile Problem
2. Introduction To AI Governance and Why We Must Be Involved
3. Productization Phase
4. Commercialization and Monetization Phases

Section 10: Modern Strategy Concepts

1. Super Platforms and Content Fortresses
2. The End of Easy Growth: Introducing Growth Efficiency
3. What Happens When Data Science Initiatives Fail?
4. Impacts of Geopolitical Instability on Data Science Teams
5. Inflation's Impact and Business Needs Met by Data Science

Section 11: Causal KPIs And Communications Framework

1. Introduction To Causal KPIs
2. Implications of Causal KPIs
3. Microsoft Causal Communications Framework
4. Amazon Causal Communications Framework
5. Core Rim Model and the Path To Causal