Essentials of Insurance Analytics

Data Literacy, Analytics and Data-driven Decision-making in Insurance

WK	Date (6-8 PM ET)	Topic	Date (7-8 PM ET)*	Topic
1			March 3	Leading an Agile Data-driven Insurance Enterprise
2	March 8	Communicating Data To Drive Enterprise Performance	March 10	Week 2 Group Presentations
3	March 15	Developing Enterprise Readiness and Business Issue Understanding	March 17	Week 3 Group Presentations
4	March 22	Understanding and Preparing Data	March 24	Week 4 Group Presentations
5	March 29	Achieving Strategic Priorities with Predictive and Prescriptive Analytic Models	March 31	Week 5 Group Presentations
6	April 5	Leveraging Modern Big Data Analytics for Competitive Advantage	April 7	Week 6 Group Presentations
7	April 12	Managing and Deploying Data Science Projects	April 14	Week 7 Group Presentations
8	April 19	Creating Business Value with Data Governance & Bringing It All Together	April 21	Week 8 Group Presentations

* Zoom opens at 6 if any group wants to work on presentations before class.

Course Structure

- Course meets from 6-8pm ET on Tuesdays and 7-8 pm ET on Thursdays
- Each week covers a single topic
- Tuesday Schedule
    - Short group task related to topic. (30 min)
    - Instructor led presentation (30 Min)
    - Guest Instructor Led Case-study (30 Min)
    - Groups are assigned "low stakes" take home exercise (15 Min)
    - Zoom left open for 60 min if groups want to work on exercise.
- Thursday Schedule
    - Group's have 1 Hr to work on exercise before class or can do asynchronously between classes.
    - 10 min. Presentations by each (4x) group
    - Instructor led debrief. (10 Min)
    - Preview Upcoming Topic (10 Min)

Week 1: Leading an agile Data-driven Insurance Enterprise

- Introductions & review of experiential framework for course
- Understand how data-analytics capabilities relate to competitive advantage.
- Understand how analytic skills differentiates insurance leaders and their enterprises in a data-driven world.
- Compare typical insurtech focus on agility and speed to incumbent focus on risk. They are not mutually exclusive.

Week 2: Communicating Data To Drive Enterprise Performance

- Understand how to communicate analytical insights in the context of dashboards and Key Performance Indicators.
- Identify uses for data analytic visualizations in a personalized context.
- Create visualizations to optimize decisions across an array of competing priorities and situations.

Week 3: Developing Enterprise Readiness and Business Issue Understanding

- Exploring descriptive and diagnostic analytics
- Leading analytics by shaping the decision environment.
- Analytics Based Strategic Planning
- Explore how leaders define business opportunities through the decomposition and recomposition of the business problem into subtasks designed to support an analytic approach to decision making .

Week 4: Understanding and Preparing Data

- Lead data acquisition, preparation and integration of quality data.
- Understand the requirements, rules, and/or recommendations (including ethical considerations and regulatory requirements) that guide organizations into successful implementations of analytics initiatives.

Week 5: Achieving Strategic Priorities with Predictive and Prescriptive Analytic Models

- Introduce predictive and Prescriptive modeling, Artificial Intelligence (AI), Machine Learning (ML).
- Demonstrate understanding of basic descriptive statistics and probability concepts.
- Understand the limitations and possibilities of analytics-based solutions to a business problem.
- Gain awareness in what it takes to lead a modeling effort that uses basic and advanced analytics tasks
- Consider project management and key ethical considerations

Week 6: Understanding Modern Big Data Analytics

- Introduce and use data mining frameworks to understand the iterative cycle of analytics-based leadership. ’
- Explore commonly-used analytical toolsets and approaches, and tradeoffs associated with using them.
- Understand specific job-related skills and tools in the field of data analytics.
- Understand impacts of big data on industry.

Week 7: Managing and Deploying Data Science Projects

- Understand role of technical and non-technical leaders and managing projects from idea inception to impact.
- Testing analytics-based models. (technical vs. business validation)
- Deployment of the results of an analytics-based undertaking.
- Make adjustments to an original problem in line with your newly acquired knowledge and updated business understanding.

Week 8: Creating Business Value with Data Governance

- Understand data governance in the context of leading an analytics-centric organization.
- Understand the importance and risks associated with poor data quality in analytics.
- Introduce tools and techniques that support data governance and enterprise wide model management.
- Bringing it all together. Review skills to build and maintain competitive advantage.
- Award certificates

Connect with the best

Learn through participation

Solve with confidence.