Marketing Databases and Data Visualization

Modern marketing uses databases extensively. For example, direct marketing uses consumer or business databases to generate customized targeting strategies in order to promote products and services. In this course, we will learn the skills of accessing, manipulating and displaying marketing databases in order to gain insights into consumer behavior and business practices. This course will offer highly sought-after technical resources for marketers, such as using the Structured Query Language (SQL) to access and manipulate large database, R statistical and programming environment for data visualization and Python for web data scraping.

Marketing Analytics II

The effectiveness of marketing decisions highly depends on the information obtained through marketing analytics. Marketing analytics allows companies to gain an advantage by serving customers better than competitors do. The course Marketing Analytics II builds upon Marketing Analytics I and will cover a number of advanced analytics problems focusing on methodologies and their implementations. Students will enhance their knowledge and understanding of how marketing analytics is applied in practice and can benefit marketing decision-making. There is a high level of “hands-on” knowledge and active learning involved, so that students will be able to implement the techniques in their future careers. Teamwork is an important part of this course as well. Students collaborate with team members on projects covering an array of practical business settings and communicate findings and recommendations in written reports and in-class presentations. Different research designs, methods of model estimation (Bayesian and frequentist), marketing models and analyses are discussed and applied in individual and team projects. The course helps students to gain hands-on knowledge of marketing analytics and how to use and interpret the information it provides. The scope will range from qualitative to experimental and quantitative analyses used to support marketing decisions. Projects focus on topics such as experimental design, conjoint analysis for new product development, resource allocation in the context of customer satisfaction, market segmentation, brand positioning, pricing, new customer acquisition, and customer retention.

Consumer Behavior in a Digital World

This course centers on the role of the consumer in the marketing process. Students will gain an understanding of the psychological foundations of consumer behavior—the cognitive, affective, and social mechanisms that explain why consumers do the things they do. Students will also explore how these mechanisms shape behavior in the “digital world” inhabited by modern consumers, one defined by the interaction of “new” technologies with “old” psychological processes and environments. As the landscape of this digital world continues to evolve, knowledge of fundamental concepts from consumer behavior will allow marketers to understand and influence consumers both now and in the future.
Digital and Social Media Marketing

In today’s world, it is difficult to imagine running a business without an online presence. Consumers spend a significant portion of their time online, and, when buying a product, they may either collect information from the web and/or make a purchase on the web. Too many companies, the web has become a crucial piece of their marketing strategy. This course is designed to provide students with knowledge of such strategies. This course has three main objectives. (1) Students will gain industry background knowledge to navigate Internet Marketing topics including online advertising, search, social media, and online privacy. (2) Students will learn to design and implement an experiment and to evaluate an experiment to measure the effectiveness of online business decisions. (3) Students will become certified users of HootSuite, a social media management platform. Students will learn and apply best practices for social media marketing.

Entrepreneurial Marketing

This is a course about the marketing strategy from the point of view of the CEO of an entrepreneurial venture, ranging from very early to very late stages. The course takes a two-pronged approach: First, we develop tools and concepts of marketing strategy and decision making within an entrepreneurial context. Second, we use cases with firms at different stages of their life cycles from initial angel or venture capital investments through exit decisions, in order to see the issues that arise when these marketing principles are applied in practice. In some cases we show the viewpoint of the entrepreneur and in others the perspective of the investor. After all, as an entrepreneur, one cannot negotiate effectively without understanding an investor's motivations. Finally, we explore new developments in entrepreneurial marketing such as two-sided platforms, monetization models, and digital marketing in social media environments.

Data Analytics and Dynamic Pricing

The aim of the course is to develop rigorous yet practical insights into topics ranging from non-linear pricing, price customization, revenue management, bundling and versioning, channel pricing and auction designs in dynamic settings. Using real datasets and detailed exercises, these tools and concepts will be applied to diverse contexts and industries ranging from search engines to airlines, hotels and casinos to entertainment, online retailing, utilities, social media and self-improvement products. Beyond pricing issues, another aim of this class is to develop analytical skills that could be applied in diverse setting ranging from business to policy issues to major global issues that confront an informed citizenry.

Innovations in Business Marketing

Many of an enterprise’s strategically important decisions involve marketing issues: understanding how to properly segment an industrial market and target the right customer(s),
differentiating the product/service offerings, formulating pricing and distribution channels, forming the alliances and network relationships necessary for dynamic, global marketplaces. This course focuses on these issues for companies selling products or services to other enterprises. Specific objectives:

- Understand the differences between industrial customers and consumers.
- Provide decision making frameworks for managing the marketing process, e.g.
  - Strategic Focus,
  - Technology diffusion models,
  - Economic value pricing,
- Integrate marketing frameworks with financial results and business models.
- Focus on the balance of growth, risk and profitability when evaluating strategic marketing alternatives.
- Relate the creation of customer value to shareholder value.
- Look at the importance of branding and other intangible assets (intellectual property) to sustainable competitive advantage.
- Examine the interplay of internal efficiency (supply chain management) and external relationships (customer, distributor, partner relationship management).

Product and Brand Management (2 credits)

Products (and services) are at the heart of marketing and managing the balance between successful introduction of new products while continuing to market current products is often the key to a firm’s sustained growth. This course will expose students to the principles of product management including assessing the health and profitability of a product portfolio, developing go-to-market strategies for new products, and positioning and repositioning of current products. In addition, the course will address the basic building blocks of growing and managing a brand while integrating it seamlessly into the overall marketing activities of the firm.

Marketing Statistics

In business, it is often the case that data are abundant, but insights are scarce. This course engages with real-world data using the language of statistics to build models and apply analytical techniques that facilitate business decision-making. You will learn tools and approaches to address a fundamental question: understanding relationships between variables. Linear (and generalized linear) models will be applied in determining the existence of such relationships and in quantifying the strength of the relationship. Particular emphasis will be given throughout the course to enhancing your skillset with software that facilitates the organization and visualization of data as well as the estimation and interpretation of statistical models.

Financial Management
Financial management provides an introduction to fundamental concepts in finance. These concepts provide a framework for analyzing capital budgeting decisions (the investment decision). Examples of investment decisions could include whether a firm should start a new product line or offer a warranty with a product. In order to understand capital budgeting, we must also study several underlying topics such as the goal of the firm, time value of money, financial statements, cash flows, and the cost of capital. This course introduces students to these concepts and their application through a combination of lectures and problems.

**Marketing Management**

Marketing is the business function that addresses the design and implementation of strategies that serve to create, build and sustain value for the firm’s customers, and to capture a portion of that value for the firm. Successful design and implementation of marketing strategies involves the identifying and measuring customers’ needs and wants, selecting and targeting appropriate customer segments, and developing an appropriate mix of products, pricing, promotion and distribution to attract, retain, and develop customers that help achieve the firm’s performance goals. Learning objectives in this course include developing a structured and disciplined approach to the analysis of marketing problems; sharpening decision-making skills by making and defending marketing decisions in the context of realistic problem situations; appreciating how the elements of a successful marketing program fit together.

**Marketing Analytics I**

Marketing is the business function that addresses the design and implementation of strategies that create, build and sustain value for the firm’s customers and captures a portion of that value for the firm. Successful design and implementation of marketing strategies involve the identification and measurement of customers’ needs and wants, selection of appropriate customer segments for targeting the firm’s marketing efforts, and the development and delivery of strategies that satisfy customers’ needs and achieve the firm’s performance objectives. This course will provide students with an introduction to a variety of approaches to analyzing firm marketing actions. Specific topics include quantifying customer value, preference measurement, attitudinal and behavioral market segmentation and targeting, customer economics, product management, pricing and advertising response models and digital marketing analytics.

**Capstone**

The marketing intelligence capstone course is a hands-on learning experience aimed at pulling together all of the different tools and frameworks learned across the MS curriculum. Students will work in teams with an organization on a real marketing problem. This will give students the opportunity to tackle a problem with imperfect data, uncertainty, constantly changing environment, and real deliverables. The students will work under the advisement of the faculty member, as well as with individuals from the “client” organization. In addition to this deep hands-on experience, the course will include workshops and case studies with practitioners from several different organizations providing students with exposure to cutting edge techniques and best practices.