By Students For Students:

Tips from MSc
(Marketing Analytics & Insights)
Seniors

mscmarketing.nus.edu.sg

Content

Masterclass – Priceless
By Lim Zi Ai

Why should Hinge revise its pricing model? Should its product be refined accordingly? How does it measure against competitors? How should the new product and pricing model be advertised? These were the questions which we asked—and answered—in the final project for **PRICING ANALYTICS**

Truth be told, I was definitely intimidated by the module outline at the outset. Nonlinear pricing? Bundling? Revenue Model Design? What did they even mean, and how would I master such foreign topics? Turned out my anxiety was completely unnecessary: 13 weeks later, I find myself explaining and applying these concepts confidently: non-linear pricing involves selling additional units consumed at different prices; bundling combines different services and products into a "bundle" to induce customers to buy more; and revenue model design imparts the principles behind a scalable and sustainable pricing model that strives for long-term, win-win relationships.

At the pace of a topic per week, what I discussed above comprises just three weeks' worth of content—just imagine how much more you'd learn at the end of 13 weeks. Pricing for different segments? Sure. Optimal pricing for monopoly and competition? Of course. Data analysis? How could we not, students?

The common thread that runs across topics is, of course, profit maximisation, which is but essential for the budding entrepreneur, the pricing consultant, the everyday consumer, and of course, the all-rounded Marketing Analytics and Insights student: that is, YOU. Pricing Analytics is not only theoretical, but applied, rooted in real-life examples and case studies, thanks to the prof's consultancy background. We answer not only the why's, but also the how's in keen detail, right down to the very last cent of how much more money you'll make if you slash prices; and how much value you'd extract from customers, given certain fixed and variable costs. If you're worried about mathematics, don't be. The prof takes you through every equation step by step, every graph line by line, ensuring that everyone has caught up before moving on to the next topic.


How much would you price kisses from huskies? Hmm . . . I wonder whether I can apply Pricing Analytics to answer this question.

Our prof is as brilliant as he is approachable. First, he actually insists on being addressed by first name; call him Prof at your own peril. Unread emails in your inbox will start accumulating once the semester starts, but his emails will be among the rare ones that you anticipate and click into immediately, for he consistently makes expectations crystal clear while dispensing life advice in the same breath. At the end of his course, you learn so much more than just pricing analytics, but also how to find success at work (always take credit for your work!) and in life (live well, love deep, and laugh hard). If you're so lucky, he might just serenade you with the piano, too.

Registering for Pricing Analytics has been one of my best decisions, and I trust that it will be yours too. Maximise your returns from the MSc (Marketing Analytics & Insights) Programme, and register for it now.
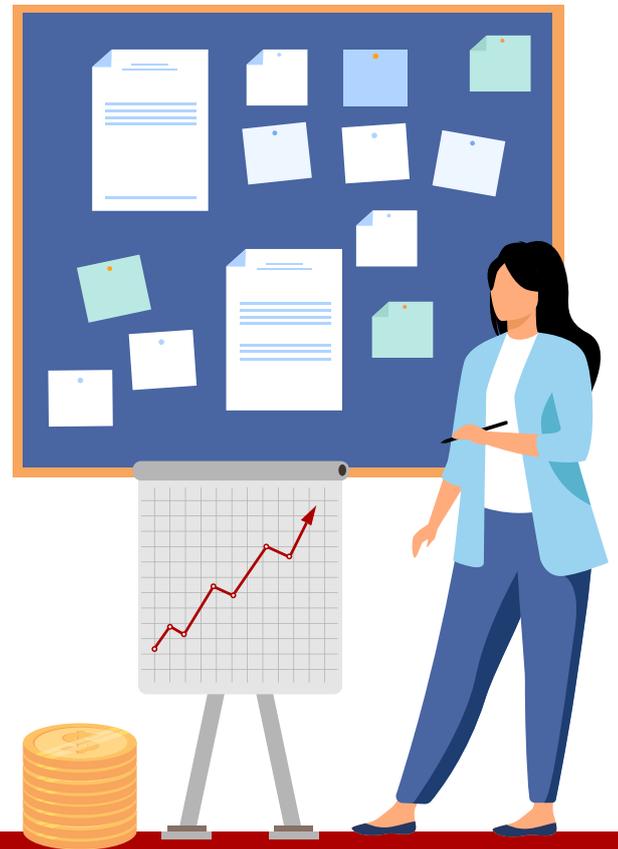
About Lim Zi Ai . . .

A former Corporate Communications professional with an educational background in Sociology, Zi Ai joined the MSc (Marketing Analytics & Insights) to marry the art and science of marketing and bridge the gap between theory and practice.

Today, as a Digital Marketing Intern at Finn Partners, theories come to life with her everyday responsibilities in managing brand awareness and lead generation campaigns, whether paid or organic, display or search, on Google or Facebook. Find out more about her at **www.limziai.com**!

Any tips for MSc (Marketing Analytics & Insights) students?

NUS Libraries are great for last-minute cramming, yes, but please make use of its digital resources too! Install the proxy bookmarklet, and gain access to thousands of journals and statistics for free. Your reports will never be the same again.

Reports aside, enjoy your time at NUS! The MSc (Marketing Analytics & Insights) programme offers an innovative curation of modules that allows one to blend the art and science of marketing. From digital marketing essentials and rigorous data analysis to branding strategies built on a bedrock of industry trends and psychological insights, our professors are dedicated to nurturing all-rounded marketers in the digital age and beyond.

A Tale of Two Modules, and More
By Doris Huang Xiangxi

I find **CUSTOMER RELATIONSHIP MANAGEMENT** the most interesting and insightful module in my MSc (Marketing Analytics & Insights) programme. I learnt about how to better understand customers at different stages in the business cycle through quantitative analysis. The module is also full of case studies and business applications that help me to understand better customer behaviour models and interpret the results thereof, and also how to effectively communicate such findings to stakeholders. I appreciate very much such learnings drawn from the practical cases and applications furnished in this module.

I respect all my professors – they know what they are teaching, and they do so professionally. Each have their unique teaching style but if I have to say who my favourite professor is, I would say is my prof for **DIGITAL MARKETING**. The prof is conscientious and puts a lot of effort into his teaching, coming up with loads of examples with conclusions/findings that help me appreciate and understand the concepts and relationships better. He is also very considerate, offering to help every time a student seemed to have doubts. And he firmly believes in class participation. He encourages us to speak up and that helps us to be confident and improves our English as well.

As part of the MSc (Marketing Analytics & Insights) programme, students have the option to choose to work with companies for the final project. Our team managed to help a local shopping mall in Singapore on their customer development. It is indeed a great opportunity to expose oneself to the real business world.

I believe that before you step into the classroom (including Zoom meetings), you must be curious about how it is like to study here. Having spent one year in the programme, here's some advice:

Think of your career plan and your interest one more time. But this time, think carefully and don't forget to look at the module details. I am sure that most of you have already thought hard about the programme before you applied but I suggest that you think even more specifically about your plan for the year. Perhaps you can dig deeper into some modules that are related to the area you want to land your future career on, rather than just complete every module with no specific purpose. You should also have an idea of what industries/companies you want to enter upon graduation. While these plans may possibly change along the way, it's still a good start to know where you are heading.

The other is more specific: refresh your knowledge of statistics and learn programming in advance, if possible. Such modules shouldn't be too technical, but it is definitely worth the while to learn them earlier because when you are enrolled in MSc (Marketing Analytics & Insights), you can then understand the fundamental methodology faster and deeper so that you have more time to learn more of other aspects of analytics.

Throughout the programme, I have harvested three valuable skills:

First, coding/technical skill. Some of the modules help us develop our expertise in coding and fundamental algorithms. Next, an analytical mindset. Not only did I improve my professional skills in analytics but I also learnt a lot about how to behave like an analyst and deliver/present findings effectively. I also gained plenty of experience in teamwork. I am constantly getting better at collaboration, time management and dealing with disagreements, thanks to all the projects I had to do.

And with that, I wish you all the best in your MSc (Marketing Analytics & Insights) programme. 😊

About Doris Huang Xiangxi . . .

Doris developed her interest in Marketing Analytics when she did an internship at Nielsen. She truly believes analytics can drive the decision-making process more efficiently, and the MSc (Marketing Analytics & Insights) programme helps her to become a qualified marketing analyst.

Any other tips for students?

When doing team projects, seize the opportunity to try different roles. Don't just stick with the one you are used to and good at. Experiment so that you can see different perspectives for a more thorough understanding.

CODING
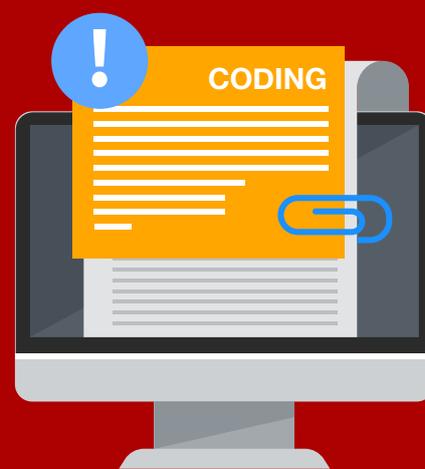
Hands-on Project for Deep Understanding
By Mahnoor Fairuza Khan

I was in the final year of my undergraduate studies in Bangladesh. Aspiring to be a successful marketer, I decided to pursue a graduate degree that can help me achieve that dream – something that will give me the skill set needed to meet the demands of a dynamic working environment.

Deep down, I knew that whichever university I settled for, it will be a close call. I also harboured doubts if I can ever find a programme tailored absolutely to my liking. I shared these concerns with my parents and they, knowing that I have always wanted to study at NUS, pushed me to explore the programmes this elite university offers.

Initially, I brushed off the idea, telling them that I will never get in given the intense competition in NUS, and perhaps, some things are better left as a dream. Fast forward a few months, I find myself sitting for my application interview, and eventually receiving an offer to study there. I thank my parents for nudging me to look into the MSc Marketing Analytics and Insights (MAI) programme offered by NUS Business School. Contrary to my initial hesitation, I found my perfect fit, not to mention becoming the only Bangladeshi student in the inaugural cohort of MSc (Marketing Analytics & Insights).

The beauty of NUS MSc (Marketing Analytics & Insights) programme is that I get to holistically learn about Digital Marketing, Market Research, Consumer Insights, Big Data, alongside Customer Relationship Management, Data Visualization and much more – knowledge that is useful in this fast-changing business

Aside from the formal education, another priority as an international candidate is a university that facilitates a great on-campus life with a global learning experience. NUS offers just that. And it is with confidence that I present you the testament of my NUS Biz experience.

NUS has a collegial atmosphere, and the MAI programme provides holistic learning on various aspects of Marketing that are pertinent to today's dynamic working environment.

During my candidature, one of my favourite modules is **DIGITAL MARKETING**. This is my first time studying a course that focuses on how marketers capitalize on digital platforms to capture customers and deliver value. To me, Digital Marketing is not just a component of communications. In this era with high Internet and cell phone penetration, it is the primary medium to reach out to a large audience base.

From this course, in particular, I learnt about search engine optimisation along with display advertising and mobile marketing. My favourite topic is content marketing as I clearly get to see how every brand's DNA and strategies are different. The highlight of this module is the project presentation that I did with my team. We worked with Google Singapore and interviewed one of YouTube's advertising managers. The project was on online video ad consumption where we ran A/B testing to do a behavioural analysis of YouTube's audiences.

The professor for this module ensured that we learnt everything first hand, with practical examples and explanations derived from successful online business models and his research. He is very open to having dialogues with students and always appreciated everyone's inputs.

I also find the Digital Marketing module relevant as I am able to relate to it every time I come across something on my socials. This really helped in connecting my learnings from the classroom to real life. So, while you're at it, take this opportunity to live in the shoes of a consumer. You'll enjoy and learn much from Digital Marketing – both the conceptual as well as the practical aspects. What better way to expand your knowledge and be "entertained" at the same time!

About Mahnoor Fairuza Khan . . .

As part of her MSc (Marketing Analytics & Insights) internship, Mahnoor worked as a project consultant for a pet-care startup in Singapore that operated through digital platforms. Starting from research to collecting and analysing data, and penning down the recommendations, she utilised what she learnt about search engine optimisation, mobile marketing, and the allocation of marketing costs. This internship also led her to explore her newfound love for Consumer Analytics.

After obtaining her MSc (Marketing Analytics & Insights) degree, Mahnoor is working as a Market Specialist for Facebook, putting into practice what she has learnt from NUS MSc (Marketing Analytics & Insights) programme.

Some pearls of wisdom from Mahnoor

Use your insights and don't shy away to join in a conversation that your professor prompts during the class. Believe that, even if you're not a swimmer yet, you can still dive deep and explore!

Go Where Your Customers Go
By Ajith Kumar Ramasamy Madeswaran

Let me be honest. When I started writing what I wanted to tell my MSc (Marketing Analytics & Insights) juniors, the thing that stood out was how fun it was to sit in the **MARKETING ANALYTICS** class every week, participate and contribute ideas and work on cases; rather than the topics that were covered. There were a lot of key takeaways from this module that have helped me in my personal as well as professional life. So, I thought I will write about how to best look at this module and the takeaways that you'll gain from it that are not explicitly stated in the lectures.

The customer is always right

In the 13 weeks of lectures, you will frequently notice the professor say "Go where your customers go" – that would be his solution to the most pressing questions and discussions. As simple as it seems, it is one of the best advice EVER. No matter what industry and position you take up, at the end of the day, this simple statement will be the guiding light in many business scenarios.
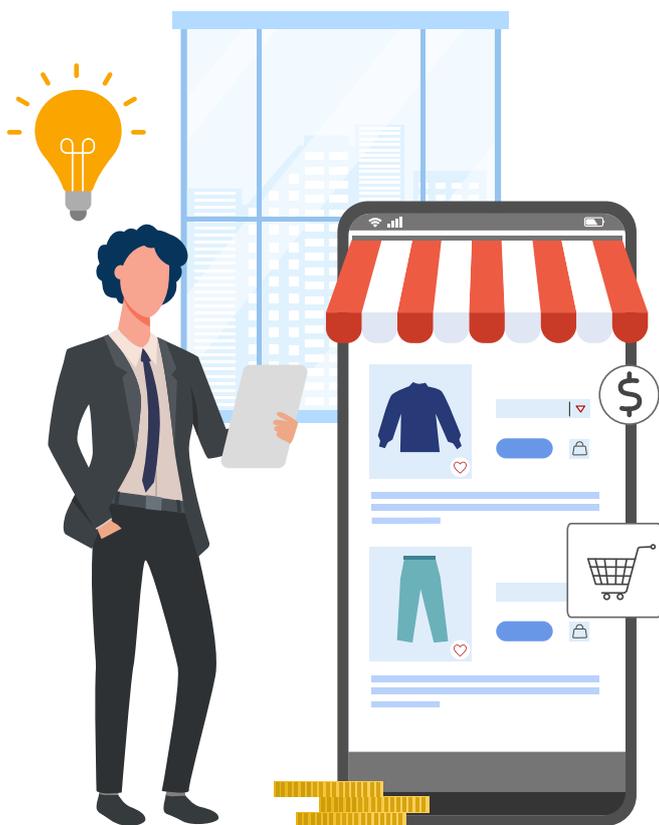
The numbers are there just to guide you

Marketing is an art (and a bit of a science) because there is no one set of solutions or a playbook for you to follow. Go after your customer needs and wants, understand them, their perceptions, while keeping in mind the market and other tangible and intangible things, and make decisions based on data. But, having said that, the data is there just to guide you and sometimes help validate your hypotheses. Your entire story is not just based on numbers, it's the combination of numbers and the right story that matters. You will realise this as the course progresses, through various cases that you will be exposed to.

Uniqueness of this module

This module is one of the those where you will integrate data with marketing concepts to help you see through the issues I mentioned above. The class is very interactive and provides a comfortable space for everyone to come up and share their ideas freely and confidently.

About Ajith Kumar . . .

Ajith is interested in Marketing and believes strongly that analytics is a must-have skill in this digital age. Pursuing this programme turned out to be one of the best decisions he has made! He interned in two companies in data-centric positions, and thinks all the modules that he studied had prepared him well to take on these roles. Having knowledge of both marketing and analytics puts him in a very sweet spot.

His two-cents worth . . .

Have fun while learning this module, appreciate the concepts discussed in class as they are not a closed-end set of instructions that you need to follow. Rather it's an open-ended set of frameworks for you to explore. And use the cases and simulation game to improve your marketing skills.
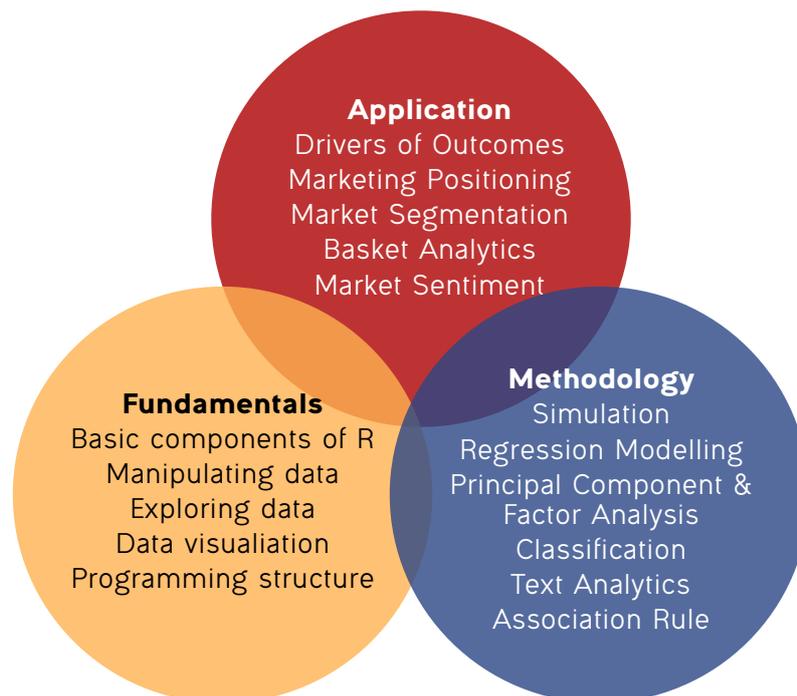
What's So Big about Big Data in Marketing?
By Liang Ruiyin

BIG DATA IN MARKETING (BDM) is designed for MSc (Marketing Analytics & Insights) students to apply statistical knowledge and data analytical techniques to business contexts. To me, BDM is the most hardcore but also the most inspiring of all the modules. Big data gives us eyes and ears into our marketing initiatives. It captures insights into our prospects and customers at a level of detail never before possible.

My professor for BDM makes a killer combination of theory and practice. BDM covers not only topics but three dimensions of knowledge – fundamentals, methodology and application.

Application
Drivers of Outcomes
Marketing Positioning
Market Segmentation
Basket Analytics
Market Sentiment

Fundamentals
Basic components of R
Manipulating data
Exploring data
Data visualiation
Programming structure

Methodology
Simulation
Regression Modelling
Principal Component &
Factor Analysis
Classification
Text Analytics
Association Rule

I think the most special part is about BDM is how it organises programming, statistics, and marketing in a perfect way. It allows marketers to respond to real-time audience actions and drive customer behaviour in the moment.

From fundamentals, I learnt the steps of doing basic data analytics, from cleaning data, collecting Web-based data, manipulating data, and data visualisation. As a result of these activities, I learnt extensively about planning for and collecting data to analyse various projects. What's more, I also gained hands-on experience in data analysis and learnt to make more memorable presentations and data visualisations.

From methodology, the different methods learnt allowed me to examine the tools used and determine what works best to solve which problem. From basic linear regression to machine learning, I became more

knowledgeable as the professor kept deepening my understanding of data analysis to hone my analytical skills.

From application, the cases that the professor provided are real-life cases that helped me apply analytical process to real-life decision making situations to both understand the situation and develop and drive strategy.

Did I learn something that I would otherwise not know? This is an absolutely BIG YES! Before BDM, I knew nothing about data analysis. But after this module, I feel qualified enough to handle a marketing analytics project on my own. It has taught me a lot of things that are required to be an analyst. Considering today's innovative market, this course definitely helped me to understand how to analyse the market or company or any data.
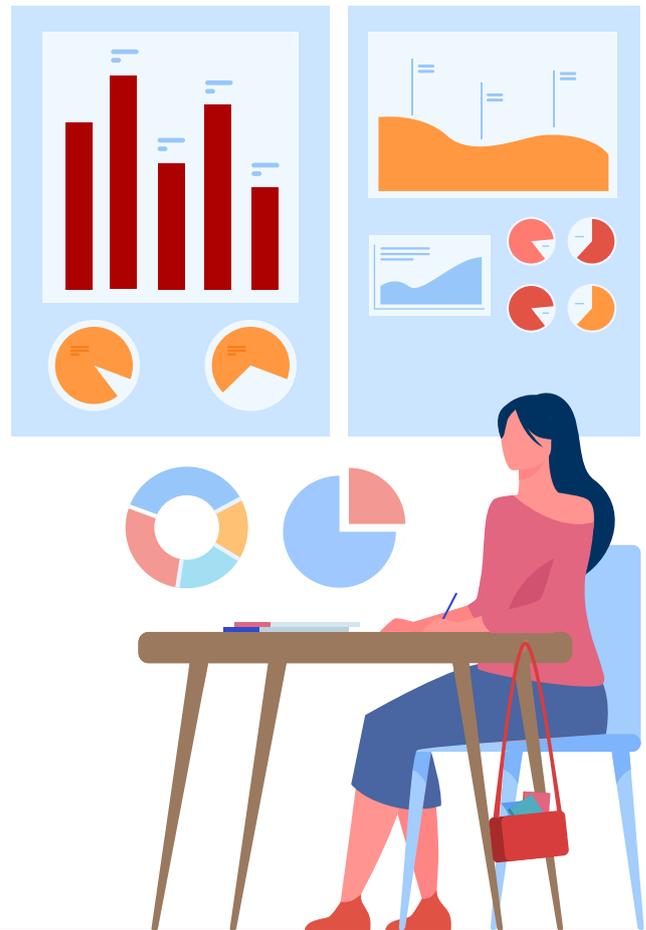
About Liang Ruiyin . . .

Ruiyin says she's interested in using analytical methods in marketing practice. She believes growth-based marketing is an exciting future trend, and wants to position herself as the connecting bridge between data engineers and strategic managers, to facilitate the value maximisation of data analytics. To fulfil her goals, Ruiyin hopes to upgrade both her analytical skills and marketing knowledge in the NUS MSc (Marketing Analytics & Insights) programme. It has a strong emphasis on quant skills such as analytics and programming. It perfectly matches her interests and expectations.

Ruiyin interned as a business analyst at Shopee, mainly responsible for the user experience study. This internship requires her not only to be proficient in qualitative or quantitative research methods but also to have a high degree of business sensitivity and be able to link user insights with business judgments. She feels that almost 70% of the skills she uses during the internship comes from the programme including research methodology structure, experiment design, but also the details analysis process, data validation. She greatly appreciates MSc (Marketing Analytics & Insights) for teaching and inspiring her with these skills sets.

Any tips/advice to offer to MSc (Marketing Analytics & Insights) juniors?

The learning curve is highly dynamic. In the first lesson, you'll be saying "Hello, world," and next, you are expected to crawl data from the web site.

My advice would be:

(1) Plan your time wisely: This module will be more time-consuming than other modules because you need to do a lot of self-learning. Please plan your time well.

(2) Peer learning: Find a like-minded classmate to study together, go through assignments together, help each other to check coding, and supervise the progress of pre-learning and reviewing.

Going from a Zero to a Hero with Consumer Insights
By Joseph James Faddoul

The **CONSUMER INSIGHTS** module changed the way I understood the interaction between firms and customers, while also tying together many of the other concepts we learned throughout the programme.

While in *Big Data*, we learn tools and techniques for deriving and displaying data insights, and in *Marketing Analytics* we learn the many applications of data analysis in marketing through the lens of product management; in *Consumer Insights* we blend technical skills with insightful theories to determine how best to interact with customers. This module therefore enriched my knowledge of the foundations of marketing by explaining how psychological insights can drive data analysis when making business decisions, while also giving me tons of hands-on practical experience through the final project.

Theoretical
Psychology
Economics
Marketing

Consumer Insights

Applied
Web-scraping
Text Analysis
Regression
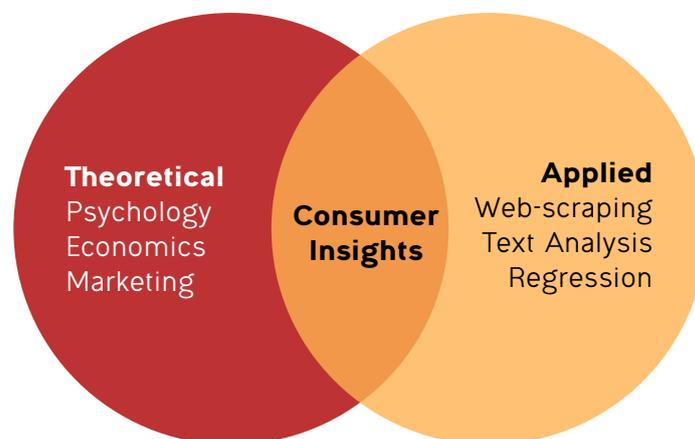
The *Consumer Insights* module was the only one that encouraged us to go through the whole Marketing Insights process of collecting our own data, analysing that data, and creating actionable insights and recommendations for a firm. For the final project, we decided to look at how a local shopping mall can better position itself when marketing to Gen Z customers. My professor had ample professional contacts in the retail industry and was able to connect

us with a central mall to use in our study. We then collected data through surveys, observations and web-crawling to derive meaningful insights and construct actionable recommendations for the mall. This experience was like a sample consulting project in that it taught us a range of key consultant skills including communication with a client, presentation and working within deadlines, while also bolstering our learning from class.

As well as the professor's plethora of contacts in industry, she also has a hugely broad academic background and is able to combine knowledge on psychology, economics, marketing and business management to give us a really complete holistic overview of modern-day marketing. Her assignments can be difficult, and the class requires quite a lot of hard work, but it paid off ten-fold for me as it took me from a complete marketing novice to a well-rounded and well-informed marketing graduate.

For new students joining the programme I would say be ready to learn a lot and make the most of the immense range of knowledge and professional contacts that the professors have. Professors are always happy to chat directly, so never hesitate to email them, and don't be afraid to lean on the hard-working admin team for help and advice too.

Like anything in life, you will get out what you put in so I would recommend diving head-first into classes and societies and being open to all the amazing opportunities that NUS offers.

↰ Enjoying some class bonding activities despite the pandemic as part of the mid-autumn festivities.

Personally, I have found an amazing range of opportunities through the Business school and in the wider NUS student body where there's something for everyone from exciting technology clubs, to finance and investment societies, to sports teams.

About Joseph Faddoul . . .

I'm born and raised in England to Irish and Lebanese parents and so I grew up with a distinctly international mindset. I completed my undergraduate degree in Toronto as a double major in Physics and Philosophy (super interesting combination!), and then I completed a Master's degree in Operations Management. Following that, I worked in the defence industry as a manufacturing engineer, but I noticed I was much more passionate about customer-facing roles, particularly in sales or marketing, so I joined the NUS programme in Marketing Analytics and Insights to re-train and ultimately to get into a customer facing role. In my spare time I play guitar and train as a lifeguard on the NUS Life Saving team. I'm also learning Chinese! Ni Hao!

↰

Joe (left) with Nimisha, classmate and fellow host of the end-of-semester celebrations.

Step into the World of Python Programming
By Candice Wenyi Huang

As a Marketing Analytics student, I'm curious about how **PYTHON PROGRAMMING** language deals with data and statistics, and why it is so much in demand in business. This curiosity was assuaged during the 13-week course. The module covers introductory Python programming language, techniques and basic data analysis, in the context of real-world business problems and practices. As the course progressed, I found that it widenedmy horizon and equipped me with new programming skills to cope with data and understand how to make better business decisions.

If you are new to computer programming, no worries. Initially, I was concerned that my lack of knowledge and experience in programming will put me at a disadvantage since Python is regarded as difficult and challenging to master. To my surprise, all these concerns were unfounded. Instead, kudos to NUS and their professors, the module was designed to be beginner-friendly with a clear structure and helpful guidelines consisting of digestible demonstration and practices, so that I can enter the world of Python programming seamlessly and effectively.

What's more, after getting a handle of Python programming, I find it useful and practical in the real world. I learnt how to utilise Python language to read data, including statistical overview, calculation and graphical presentation, as well as re-construction of data. As more and more companies require employees to be equipped with programming abilities, I find this module helpful in enhancing my competitive advantage in the employment market.

My Python professor is energetic, and really skilful and experienced in fundamental language teaching and advanced techniques development. He inspires and motivates students with interesting application of programming into logical mathematical solutions, games and movies. Thus, the class is never boring, but filled with exciting and closely related to life experience examples.

Candice (middle) says the module was structured to help beginners like her learn Python effectively.

Any advice to new students?

Having been in the MSc (Marketing Analytics & Insights) programme, I would say that it helps to:

1. Be open-minded. Don't be afraid even when you don't know something about programming language

2. Pay attention to real busines data and statistics in news

3. Brief yourself about the programming languages you'll learn before you begin your studies.

4. Self-learn some online programming materials

5. Consult and talk to your professors. I find NUS professors are very helpful in guiding students through the learning process

About Candice Wenyi Huang . . .

Candice has a Bachelors in Business Economics and has never learnt programming before. She finds it important to apply logical and objective programming tools and techniques to seemingly intuitive and subjective consumer behaviours and marketing scenarios to gain insights for better business decision making.

The Blended Learning Approach
By Nimisha Bhatia

One element that stands out from my experience at NUS is the integration between Zoom and in-person classes. The blended learning approach adopted by the programme enabled students physically present in Singapore and virtually from all over the world to effectively contribute to class discussions and exchange ideas among ourselves, thanks to the office and the university!

While some courses focused on the technical aspect of market intelligence, **MARKETING ANALYTICS** trained us in deriving insights and decision making from synthesized data. This module helped us realise the importance of brand sentiment and how we can quantify consumer perceptions. Moreover, it enabled us to filter through an overwhelming amount of data and focus on what is relevant for consumer marketing and strategy.

↰ Balancing technical aspects with application is the name of the game.

The "So what?" Question

Marketing Analytics focused on asking the question "So what?" that many department heads will ask you when you're working with data. So what if Brand A's customers are more price-sensitive than Brand B's? So what if Brand C's buyers value service more than others? What does this mean for the marketing department or the brand? How can we capitalize on it? Until you can provide actionable insights and recommend next steps, your analysis will always meet a dead end.

Change is the only Constant

The module provided a hands-on experience through a market-simulation game. The simulation is a vital experience for any marketing programme as it recreates what brand and retail managers at such companies face on a daily basis – predicting changing customer preferences and needs, price sensitivity, competitive behaviour!

Theory and Application Go Hand in Hand

For me, the unique value this module provided was that what I was learning in class could be simultaneously applied in the simulation game. In class, we discussed theory from slides and textbook. After class, we would analyse how this information could be applied to our simulation game and grow our market share as well as profitability.

My professor created the market simulator for Marketing Analytics! Moreover, he wrote the assigned case studies based on his past international experiences in the field of fast-moving consumer goods (FMCG). He would discuss a theory and provide an example from his experience at Nielson or Unilever, how he not only tested the concept but also what his findings and conclusions were. This would lead to debates among ourselves that would last way past our class time.

Take-aways

I believe the most valuable skill I have learnt from this MSc programme is the ability to balance between the technical aspect (programming languages and statistics) and the theoretical aspect (strategy and actionable insights). They are 2 sides of the same coin, incomplete without each other. The statistical analysis helps you convert data into information whereas marketing theory helps you to strategise your next move based on the information. Now, in every project (be it for class or internship or job interview), along with my analysis, I ALWAYS have a slide with findings and the next step for the company and trust me, that additional effort goes a long way!

Tips and Tricks for Juniors

Participate! Participate! Participate! Don't shy away from conversations - you're at NUS to take advantage of the diverse environment it offers you. Know your classmates beyond the 4 walls of the classroom or zoom calls, bond with them, listen to their stories and tell them yours.

Also, be excited to learn rather than focusing on grades! A number does NOT define you, but your interests, your goals and your dreams do. Be passionate about what you're studying, expand your boundaries, there is so much we can gain!

About Nimisha Bhatia . . .

With a background in business, Nimisha pursued MSc in Marketing Analytics and Insights to further her interest in the field of marketing analytics. While she found her balance between the art and science of marketing, she also participated in extra-curricular activities such as Student Relations team lead at the Master's Club (Toast Master's Club). Her philosophy is that "*every opportunity has a shelf life, so grab them while you can.*"

"Moving halfway across the world from Canada to Singapore was definitely a difficult decision. What made this move easier, however, was simply seeing the opportunities that the NUS Business School and the MAI program offered me. Today, when I look back at the decision I made 6 months ago of attending NUS Business School, I am happy that I had the courage to follow through and very thankful for the support of my family and my friends that have made this possible."

From Marketing Department . . .

Hope these tips and tricks from your seniors are useful.
Watch out for this page as more opinions are given.