



Guided Practice Case

Fear the E-Turtle: Terps Transition to Digital

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If you're anything like us, actually 'doing' a case is often the best way to learn. With that learning style in mind, we've sprinkled italicized *interview tips* throughout this case so you can learn the fundamentals of how to answer each type of case question as you're actively thinking through each problem.

This practice case is intended to be used alone or with a case partner. In a standard case interview, you could be expected to complete a case of this length in around 30 minutes. However, if you are still in the early stages of exploring case interviews, please take as much time as you need and pay special attention to the *interview tips* included throughout this case.

For further additional 100% free case prep resources visit sniderconsultinggroup.com/case-prep.

Now, let's jump right into the case. Good luck!

Question 1: Online Education | Scenario Background & Initial Framework Prompt

With the rise of online education, the University of Maryland is considering launching a new set of fully online undergraduate programs. What factors should UMD assess to evaluate potential ROI of such an initiative?

Interview Tips:

Introduction / Background

- *Summarize the case prompt to confirm your understanding with the interviewer*
 - *Summary should confirm all relevant info to the case in a concise manner, not restate the entire prompt.*
- *Ask relevant follow up questions to capture information you might have missed, deepen your understanding of the situation, and potentially access additional background details about the case.*
 - *Good questions, if an answer is provided, will change the way you look at and approach solving the case.*
 - *Bad questions are vague, outside of the scope of the problem, or are just being asked to ask a question.*
 - *In this case, all of the background information the interviewer has access to will be provided to the interviewee upfront as part of the case prompt. In other cases you encounter there will sometimes be 'hidden' information outside of the prompt that you can access by asking the interviewer relevant questions.*
 - *Do not be dissuaded if the interviewer does not have information on a question you've asked, this is completely normal. Your questions should be seen positively as long as they are relevant to the case scenario and you limit yourself to 3-5 questions at most.*

Frameworks & Brainstorming

- *Ask for time to organize your thoughts, aim for 60-90 seconds for the initial framework question and 30-45 seconds for smaller brainstorming questions later in the case.*
- *Generate ideas in a structured manner, ideally by creating a MECE framework.*
 - *MECE stands for Mutually exclusive, collectively exhaustive*
 - *This essentially means the framework's buckets should cover all relevant aspects of the case, without two buckets overlapping into the same scope.*
- *Customize your framework to match the unique case scenario*
- *Aim to generate ideas that are applicable, feasible, and sometimes creative*
- *Don't forget to include the most obvious ideas, which can be the most important*

Answers on Next Page

Example Answers:

Interview Tips:

There is no one correct framework for case questions that involve brainstorming and creativity. However, a strong framework responding to this case question should touch upon many of the ideas mentioned in the sample frameworks below.

For more information on how to come up with a comprehensive framework, check out our free [“Introduction to Case Frameworks”](#) resource.

Overly Comprehensive Response: This response is far more detailed than you would need in a real case, but should provide you with a deeper understanding of possible answers to this question.

- Market Analysis
 - Demand for Online Education
 - What's the current and projected demand for online undergraduate programs, both globally and regionally?
 - *A good candidate should first clarify and ask the interviewer what population they are looking to address before determining how large the potential market is here. You never want to go down a needless “rabbit-hole” that could be avoided by asking the interviewer a clarifying question.*
 - Which specific subject areas or courses are in highest demand online?
 - What demographics are most interested in online undergraduate programs?
 - Competitive Landscape
 - Who are the main competitors offering online undergraduate programs?
 - What could be the University of Maryland's potential differentiator or competitive advantage?
 - How do competitors price their online programs?
 - Public/Student Sentiment
 - How do current students feel about adding an online option?
 - How might adding an online option affect UMD's ability to attract in-state/out-of-state students?
- Internal Capabilities and Costs
 - Infrastructure

- What platforms or technologies does UMD currently have to support online learning?
 - What would be the estimated costs to enhance or develop the needed infrastructure?
 - Content Development
 - How much of UMD's current undergraduate content can be adapted for online delivery?
 - What would be the costs associated with creating new content or adapting existing material?
 - Faculty and Support
 - Are faculty trained or willing to transition to online teaching?
 - What would be the costs associated with training or hiring faculty for online delivery?
 - What support mechanisms would online students require?
- Revenue Potential
 - Pricing Strategy
 - Based on the competitive analysis, how should UMD price its online programs?
 - What would be the projected student enrollment at different price points?
 - Ancillary Revenue Streams
 - What additional monetization opportunities, like certifications, online workshops, or partnerships, could be considered?
- Risks and Mitigation
 - Technological Risks
 - What are the potential challenges related to the tech platform, cybersecurity, etc.?
 - Reputation and Quality
 - How might moving online impact UMD's brand and perceived quality?
 - What strategies could be employed to mitigate potential negative impacts?
 - Student Engagement and Retention
 - What challenges could arise in keeping online students engaged and reducing dropout rates?
 - How can these challenges be addressed?
- Expected ROI Calculation
 - Investment Costs
 - How much would the total investment in infrastructure, content development, and faculty be?
 - Projected Revenue

- Based on the chosen pricing strategy, what is the expected revenue from enrollments?
- Compute ROI
 - $ROI = \text{Net Profit} / \text{Cost of Investment} \times 100$

Streamlined Interview Length Response: This response is closer to what you should aim to articulate in a time-conscious case interview. You should generally aim to have 2-4 ideas under each category/bucket when you have 3+ buckets and 3-5 ideas each when you only have 2 buckets.

Interview Tips:

When explaining your framework, it is very important to use a “top-down” style in a case interview as consulting firms typically look for very structured and logical thought. To explain the following buckets in a top-down style, a good candidate might say:

“I want to start by looking at 5 main things: First, a deeper analysis of the market, then I would like to look internally at our clients current capabilities and what costs might be associated with this venture. Next, the revenue potential of this investment followed by some risks that may come with it and possible ways to mitigate these risks. Finally, we can dive into an ROI calculation to see if this is a worthwhile investment.”

Using this style helps the interviewee stay structured and organized, and helps the interviewer know exactly how many and what buckets the candidate is going to explore right off the bat, helping them not get lost or confused in the candidates framework.

A good candidate will also spend no more than 90 seconds explaining their framework. After addressing all of the buckets in the top-down fashion, the candidate should only say 1-2 sentences per sub-bullet point, per bucket. An exceptional candidate will be “hypothesis driven,” meaning they will say one hypothesis per bucket of their initial thoughts and insights and a potential way they could test this.

For example, for the market analysis section, an exceptional candidate, after explaining their initial bullets in one sentence might say: “I hypothesize that the projected demand for online undergraduate programs is growing after the COVID-19 pandemic. By surveying students of different age groups and levels of education, we might be able to confirm this hypothesis.

- Market Analysis
 - What is the projected demand for online undergraduate programs?

- Who are the main competitors and their differentiators?
- Internal Capabilities and Costs
 - Can current technologies support online learning or is investment needed?
 - What percentage of undergraduate content is ready for online transition?
 - Are faculty prepared for online teaching or is training/hiring required?
- Revenue Potential
 - How should online programs be priced given competition?
 - Are there additional revenue opportunities (e.g., certifications)?
- Risks and Mitigation
 - What are the main technological challenges?
 - How might UMD's reputation be affected and how can this be mitigated?
- Expected ROI Calculation
 - What are the total estimated costs vs. expected revenue?
 - What is the net ROI?

Question 2: First Year Profit | Analytics

The University of Maryland currently has 20,000 undergraduate students. Survey data suggests that 10% of these students would be interested in taking a fully online program. UMD expects to attract an additional 1,000 external students for its online program. The proposed pricing for the online program is \$5,000 per year. The cost to set up the online platform is a one-time expense of \$2 million. Annual operating costs for faculty, support, and technology maintenance is estimated at \$500,000.

If UMD launches this online program, what would be the net profit in the first year?

Interview Tips:

Analytical Questions

- *Ask for a moment to organize your thoughts and/or set up an equation (~30 seconds or less)*
- *Consider setting up an equation in words before plugging in numbers for complicated problems*
 - *This will help the interviewer correct you before you go into the problem if there is a flaw in your logic.*
- *Communicate your thought process while working through each problem. Do not leave the interviewer to wait in silence while you attempt to solve the problem*
- *Check your intermediate calculations with the interviewer*
- *Check your final answer with the interviewer (e.g. "Does this figure seem reasonable?")*

- Tie your final number back to the original case question (e.g. “This figure would suggest that our client should do X, but we still need to learn more about Y before making that decision”)

Answer on Next Page

Example Answer:

Calculate potential revenue:

- From current students:
 - 20,000 students * 0.10 interested in online * \$5,000 tuition
 - 20,000 students * 0.10 interested in online * \$5,000 tuition = \$10,000,000
- From external students:
 - 1,000 external students * \$5,000 tuition
 - 1,000 external students * \$5,000 tuition = \$5,000,000
- Total revenue: \$10,000,000 + \$5,000,000 = \$15,000,000

Calculate costs:

- Initial setup: \$2,000,000
- Operating costs: \$500,000
- Total costs: \$2,000,000 + \$500,000 = \$2,500,000 for the first year

Calculate net profit for the first year:

- Net Profit = Total revenue - Total costs
- Net Profit = \$15,000,000 - \$2,500,000
- **Net Profit = \$12,500,000 for the first year**

Question 3: Prioritizing Majors for Online Learning | Brainstorming

In order to start the program off with strong footing and minimize initial setup costs, UMD would like to prioritize creating online programs for majors that would be more compatible with online learning. What factors should UMD consider in determining which programs to prioritize?

Answer on Next Page

Interview Tips:

Since you have a limited amount of time, you should only write down your buckets/categories and a few words about each idea (ex. the underlined portions of each bullet point below). You can speak about your whole idea while explaining your framework to the interviewer.

For your most important ideas, it can be useful to explain how the answer to your question would impact your decision (ex. Lab & Equipment Dependency: “My hypothesis with this idea is that if a course requires labs it may be expensive for us to properly simulate the lab experience online, and therefore we should de-prioritize courses with this feature”).

Example Answer

- Content Adaptability
 - Theoretical vs. Practical: How much of the major's content is theoretical that can be taught via lectures, readings, or discussions versus hands-on, practical components?
 - Lab and Equipment Dependency: Does the major require specialized labs, equipment, or physical resources?
- Student Interaction & Engagement
 - Group Collaboration Needs: How essential is student-to-student interaction and collaboration for the major?
 - Faculty Interaction: How frequently do students typically need to interact with faculty one-on-one?
- Assessment & Evaluation
 - Testing Modality: Can the major's assessments be effectively conducted online (e.g., essays, multiple-choice exams) versus hands-on evaluations?
 - Project & Portfolio Dependencies: Does the major rely heavily on projects or portfolios that can be evaluated remotely?
- Market Demand & Feasibility
 - Student Interest: Are prospective students for this major more inclined towards online education?
 - Employability: Do employers in relevant industries recognize and value online degrees for these majors?
- Resource Intensity
 - Tech Needs: What are the technological requirements for delivering this major online effectively?
 - Faculty Training: Do faculty members in this department already possess online teaching skills or would there be a significant training requirement?

Question 4: Computer Science Break Even | Analytics

UMD is considering making Computer Science the first major in its new program. To ensure the financial viability of this decision, UMD is meticulously planning its tuition structure to avoid any potential loss.

Currently, UMD has 4,000 students enrolled in its on-campus Computer Science program. Surveys indicate that approximately 5% of these students would be inclined to transition to an online format. Out of these students, 60% are in-state and 40% are from out-of-state.

UMD also projects the potential to attract an additional 500 individuals not currently enrolled at the university to this new online program within the first year. It's estimated that 20% of these new enrollees would be in-state students, while the remaining 80% would be out-of-state.

The university has decided on an annual tuition fee of \$2,500 per year for out-of-state students. The initial costs associated with creating and launching the online Computer Science major, including content development, technology infrastructure, and faculty training, are projected to be \$1,200,000. Annual operating costs, primarily for faculty salaries, platform maintenance, and support, are estimated at \$242,000 for the first year.

Given this scenario, how much should UMD charge in-state students in the online Computer Science program to ensure they break even in the first year?

Answer on Next Page

Example Answer

Given the provided scenario, UMD should charge approximately \$1,100 per year for in-state students in the online Computer Science program to ensure they break even in the first year.

Here's how we can calculate that figure:

Current Students

- 4000 students in current Computer Science program
 - 5% interested in online * 4000 = 200 students
 - 60% are in-state, so 120
 - 40% are out-of-state, so 80

New Students

- 500 new students are predicted to join the program
 - 20% are in-state, so 100
 - 80% are out-of-state, so 400

Total Student Breakdown

- $120 + 100 = 220$ in-state
- $80 + 400 = 480$ out-of-state

Revenue from Out-Of-State Students

- $480 * \$2500$ in tuition = \$1,200,000 in revenue
 - *Shortcut: This value is the same as the initial startup costs. Therefore, we could divide the remaining first year operational costs by the number of in-state students to find our final answer faster.*

Program Costs

- \$1,200,000 initial startup costs
- \$242,000 first year operational costs
- Total: \$1,442,000

Break Even

- $(\text{Total Costs} - \text{Out-Of-State Revenue}) / \# \text{ of In-State Students} = \text{In-State Tuition Cost to Break Even}$
 - $\$1,442,000 - \$1,200,000 = \$242,000$
 - $\$242,000 / 220 \text{ in-state students} = \mathbf{\$1,100}$

Question 5: Conclusion

You are enjoying a quick lunch at STAMP and happen to run into the President of the University. They ask you to summarize your recommendation regarding the online degree program proposal.

Interview Tips:

Conclusion

- *Ask for a moment to organize your thoughts. Aim for 45 seconds or less*
- *General format for a conclusion should be as follows:*
 - *Your recommendation stated immediately and clearly*
 - *A brief summary of the findings in the case, relating back to facts and figures calculated to support your recommendation*
 - *A brief section about the possible risks of implementing your recommendation*
 - *Some next steps about how you could mitigate these risks and how your recommendation can grow and continue to prosper in the future*

Answer on Next Page

Example Answer

Based on our analysis, I recommend that UMD should proceed with launching a fully online undergraduate program, starting with the Computer Science major. Here's a brief summary of our findings:

- **Market Analysis & Demand:** There's a clear demand for online education, both from current UMD students and potential external students. Specifically, for the Computer Science major, we have identified that 5% of the current 4,000 students would be inclined to transition to an online format. Additionally, UMD can attract 500 new students to this program in the first year.
- **Financial Viability:** With the proposed tuition structure, UMD can break even in the first year by charging in-state students approximately \$1,100 annually. This ensures the program's financial sustainability while offering competitive pricing.

Risks and Mitigations:

There are some potential risks UMD will need to navigate in launching these new programs including cybersecurity threats, reputational challenges, and potential engagement/retention issues.

- **Technological Risks:** UMD should invest in a robust online platform and ensure cybersecurity measures are in place.
- **Reputation and Quality:** To maintain UMD's brand and perceived quality, the university should ensure that the online program's content and delivery are of the highest standard.
- **Student Engagement and Retention:** UMD should implement online engagement tools and strategies to keep students engaged and reduce dropout rates.

Next Steps:

- **Content Development:** Prioritize courses that are adaptable to online learning, starting with Computer Science.
- **Faculty Training:** Invest in training faculty for online delivery to ensure a seamless transition and high-quality teaching.
- **Marketing and Outreach:** Develop a marketing strategy to attract both current and new students to the online program.
- **Feedback Mechanism:** Establish a system to gather feedback from students and faculty to continuously improve the program.

In conclusion, the online undergraduate program, starting with Computer Science, presents a promising opportunity for UMD. With careful planning, risk mitigation, and continuous improvement, UMD can not only break even but also grow and prosper in the future online education landscape.

That concludes our case! Congratulations on working through it, and hopefully learning a thing or two along the way. Feel free to visit our case prep page at sniderconsultinggroup.com/case-prep any time for additional free casing resources.