Exploring Digital Learning

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Conclusions

- The technology has been with us for 5-10 years
- Digital transformation of business schools is overdue
  - Dabbling, shiny objects instead of engaging in fundamental change
  - We know what needs to be done but are unable to do it
  - May slow down the secular decline in business schools
    - Maybe even reverse it
  - Covid-19 a missed opportunity
    - Perhaps even accelerated the decline
    - A classic opportunity for disruptors
- Personal perspective
  - What’s your experience?
Module 4: Evaluating New Market Opportunities

Thus, our central learning takeaway will be the application of our business model architecture framework to the evaluation of new market opportunities.

In addition, we’ll learn about:
- Market sizing and analysis
- Choosing among alternative value chain structures
- Assessing differentiated value in B2B markets
- Market entry and adoption considerations
- Strategies for “crossing the chasm”

Readings:
- NovaTorque Case

Videos:
- Evaluating New Market Opportunities
- Market Sizing
- Introduction to the NovaTorque Case Study
- Electric Motor Industry Characteristics: NovaTorque History and the NovaTorque Motor
- NovaTorque’s Value Chain Strategy
- NovaTorque: The Choice
- NovaTorque: The Decision
- Analyzing New Market Opportunities
- NovaTorque: Value Creation Model
- NovaTorque: Profit Model and Logic
- ‘Bowling Alley’ Strategy
- Summary
Sizing Market Opportunities

How should we approach the evaluation of new market opportunities? Please refer to the self-introduction to this module for hints.

Evaluating New Market Opportunities

First, let’s take a look at market sizing. Two commonly used metrics for sizing a market are the Total Addressable Market (TAM) and the Served Addressable Market (SAM), also called Serviceable Addressable. Following the video below, we’ll proceed to an exercise on market sizing.

Home Sizing

Assignment: Netflix SAM in 2001

Sizing Netflix’s Market in 2001

In 2001, there were 102 million TV households in the United States, of which 4.9% were in the Los Angeles metropolitan area, 2.1% in the San Francisco Bay area, and 2.1% in the Boston metropolitan area. At that time, Netflix had distribution centers in Los Angeles and in Boston. Assume that all households in these areas are within a 10-day shipping time of their respective distribution centers. Also assume that Netflix can expect a 15% penetration rate across the rest of the US.

What was the size of Netflix’s U.S. Serviceable Market in 2001?

Use the assignment below to submit your response. This is a guided assignment; below the assignment, there are questions that guide you through the analysis. I recommend that you follow the analysis by following the guiding questions below the assignment, and only then submit the assignment itself. But it’s perfectly OK to try out the assignment first if you think you have the answer.

Take

Netflix SAM in 2001

Date: April 20, 2001 8:14 AM

In Sizing Netflix’s Market in 2003, you were asked to estimate the size of Netflix’s serviceable market in 2001. Please submit your answer to the question below.

What was the size of Netflix’s U.S. Serviceable Market in 2001?

(data your response in US Dollars, without any punctuation nor the dollar sign, e.g., 300,000,000)
Netlix Streaming SAM (Optional)

I asked the Market Sliding video asking you to think about how you might estimate the SAM for Netflix’s streaming offering in your own country.

* If Netflix is available in your country, find out the monthly subscription price of Netflix.
* If Netflix is not available in your country, assume a monthly subscription price of $5, which is what Netflix charges in most markets.

Then, consider what is necessary to be able to stream movies to a TV or another device, and based on that, estimate Netflix’s streaming SAM in your country this year.

Please submit your response in the assignment below and you will receive feedback on your analysis.

NovaTorque Case Study

NovaTorque has to decide which market to enter into first. You will help the company make that choice and critique a colleague’s argument on that issue (and of course a colleague will also critique yours).

Before analyzing NovaTorque’s market entry decision, you’ll quickly learn some basic background information about an electronic motor, what goes into its design, manufacturing, and how it is measured and applied. We’ll then look at NovaTorque, its products, the value chain before the company had already made, and the markets it was considering.

To begin, please click on the NovaTorque link below (do not continue forward in the module).
Use of Electric Motors

Electric motors have been around since the eighteenth century, but did not begin to take modern form until the invention of alternating current (AC) in the late nineteenth century. Today, electric motors are very widely used and can be found in sectors such as residential, industrial, agricultural, and electric vehicles.
A Bit More on Electric Car Efficiency

The degree of cost savings in the electric car market was fairly straightforward. The situation is more complex in the electric car market. Since we are pricing the role of NovaTorque's CEO, we should really understand the key drivers of the underlying economics. In particular, the relationship between motor efficiency and cost savings for electric cars is a bit intricate. Let's get a sense of that without going into too much engineering basics.

You may want to look at the data in the summary chart from the case background, which is replaced for you convenience at the bottom of this page.

Quiz #1 in A Bit More on Electric Car Efficiency

1. The induction motor consumes 6.4 kWh per mile at 96% efficiency. Assuming that we take exactly the same electric car configuration and substitute the NovaTorque motor (95% efficiency) for the induction motor (96% efficiency), how much energy, in kWh, would the electric car consume per mile?

Assignment: NovaTorque Market Entry Argument

Now that you have read about NovaTorque and the choices it has to make, you should decide which model NovaTorque should enter. First and foremost, this is not a true decision, and you will need to justify it by writing a stand-alone argument to support your recommendation. Depending on the choices made by your colleagues, your argument may be submitted either as a revised version of a colleague's previous submission, or as a critique of a colleague's earlier submission.

In addition, we ask that you complete a short survey that adds weight to the above-market NovaTorque should enter. Your response will also be used to assign you to one of the teams in the course to whom you will attempt to rebut or critique your argument.

Both participants in the course will draft an argument and be assigned another participant's argument to rebut or critique. The arguments are submitted on the next page. The rebuttal critique stage is described on the next page.

Argument (500 words or fewer)

In this figure, you will learn which market NovaTorque should enter, and enter your argument in favor of that decision, using data and other evidence from the case. Write a strong, readable, and structured argument based on case evidence that supports the premise and logic used by your conclusion. Your analysis should be based on both descriptive and evaluative factors.

Submit your argument using the assignment below. DO NOT UPLOAD A DOCUMENT FOR YOUR ASSIGNMENT SUBMISSION, TYPE TEXT INTO THE SUBMISSION FIELD. Please note that charts and graphs do not transfer appropriately via the assignment submission field. Thus, if there is any you would like to include in this format please contact the teaching team. If you upload a document, the arguments will be returned to you and you will have to re-enter the arguments in the rich text field.

Note: You should not revise a submission using the information presented in the NovaTorque case. You do not need to do any additional research or use sources outside of course materials.

Submit
NovaTorque Market Entry: Argument
Due: April 29, 2021 11:59 AM
Assignment: NovaTorque Market Entry Rebuttal/Critique

Rebuttal/Critique (300 words or fewer)

After the submission deadline for the argument assignment, the teaching team will send you a message that includes another participant’s submission. You will be able to review who you have been paired with via link.

LETS (departmental), the Teaching Team will update this sheet in real-time. Please contact us with any questions.

Your task for the Rebuttal/Critique assignment is explained on the next page and the participant whose argument you are assigned to evaluates have chosen to argue.

If you are assigned an argument in favor of a DIFFERENT market than you have argued that NovaTorque should enter...

You will receive the argument you have been assigned. Focus on why the argument is not sound using data and reasons.

If you are assigned an argument in favor of the SAME market you have argued that NovaTorque should enter...

You will critique the argument you have been assigned and offer suggestions as to how the argument may be strengthened.

Follow the instructions in the assignment below to submit your rebuttal/critique.

Submit

NovaTorque Market Entry: Rebuttal/Critique

Due May 1, 2021 11:59AM

Explain why more than 300 words for your rebuttal or critique.

Submission Format: Copy and paste your critique or rebuttal into the text field. You will also be asked to copy and paste the original argument.

Feedback: The teaching team will provide feedback in the form of a summary announced in the class.

Privacy: Your submission will be shared with the class.

NOTE: This assignment does not end our discussion of NovaTorque. Following the rebuttal deadline, please continue with the rest of this module to find out why the company has actually done and where and part of the key lessons for us. In addition, you may want to look at your colleague’s analysis of the problem or reply early.

NovaTorque’s Decision

Next, Emily will describe NovaTorque’s reasoning and ultimate decision. As Emily goes through her analysis, if like you to climb the decision within the context of the business model architecture framework we are using throughout the course.

In essence, we are considering three potential answers to our first business model question, “Who are our customers and what is our productivity offering?”

![Logic Diagram]

We then need to evaluate each of these alternatives in terms of the key elements of our business model architecture.

For this purpose, we can focus them down and develop them a little further. For example, when we talk about the value offering options differentiated value for our customers, we break it down into two elements core, the value that our offering creates and core, the competition which determines how differentiated our offering is. Similarly, as we have already seen, market size is derived from both the value creator and the revenue side of our business model architecture.
Analyzing New Market Opportunities: Value Creation Model

For Motor:

\[ \text{Cost} = \text{Price} \times \text{Frequency} \times \text{Capacity} \]

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New value added by the company is calculated based on the cost and frequency of use.

For Compressor Part Distribution System:

\[ \text{Cost} = \text{Part Price} \times \text{Frequency} \times \text{Capacity} \]

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New value added by the company is calculated based on the part price and frequency of use.

Analyzing New Market Opportunities: Profit Model and Logic

<table>
<thead>
<tr>
<th>Product</th>
<th>Annual Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Impact</td>
<td>$1,500</td>
</tr>
<tr>
<td>Industrial Impact</td>
<td>$1,000</td>
</tr>
</tbody>
</table>

For the residential impact, we have a 4% annual growth rate. For the industrial impact, we have a 3% annual growth rate.

For the 10-year analysis, we have a 10% discount rate. At the end of 10 years, the present value of $1,500 is $5,000. The present value of $1,000 is $3,000. The combined present value is $8,000, which is the total value added by the company.
Key building blocks

• Fundamental mapping: learning outcomes, content, channels
• Programmed accountability
• Omni-channel education
  – Readings
  – Videos
  – Assignments (robo)
  – Assignments (TA feedback)
  – Debate/peer review
  – Final project
  – Discussions
  – Live sessions
    • Classroom
    • Zoom

China and the Internet

Assignment: Google in China Case Analysis

In past offerings of LEAD, I was in China as participants were working on the Google in China case (like most of us, I am at home now). As a result, I could report (when I had access) in real time how the issues raised in the case study were reflected on the ground.

May we have an update from people who are in China or have been in China relatively recently on how things have changed? For the rest of us, have you seen similar issues arise in other countries?

Google in China: Additional Perspectives

Unfortunately, the live session was limited in time so we couldn’t accommodate everyone’s comments. The good news is that our discussion forum space is virtually unlimited, which enables us to hear additional perspectives on the Google in China case. For example:

- Has your own organization faced a similar dilemma? What did it do?
- Googlers - do you think Google made the right decision in 2010? As discussed in the case, Sergey Brin’s past experiences had a big impact on the decision. Would the same decision have been reached today?
Conclusions

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• Digital transformation of business schools is overdue
  • Dabbling, shiny objects instead of engaging in fundamental change
  • We know what needs to be done but are unable to do it
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