

Investigating the Impact of the Lean Launch Curriculum for Entrepreneurship Students

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INTRODUCTION

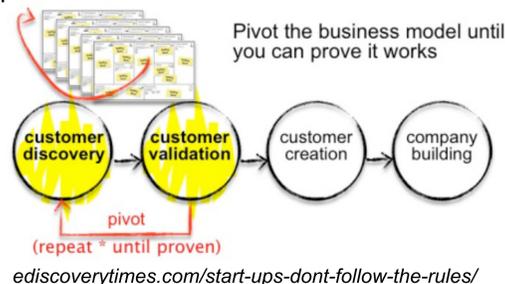
The role of entrepreneurship in engineering education has undergone a substantial transformation over the last several years. The recent widespread adoption of the Lean Launch Curriculum and Business Model Canvas has provided engineering programs with a straightforward, common curriculum and pedagogical approach to vetting potential business models.

RESEARCH QUESTION

How does student understanding change following a Lean Launch Customer Discovery course?

LEAN LAUNCH

The Lean Launch curriculum was developed by serial entrepreneur, Steve Blank, leveraging customer discovery (Blank and Dorf 2012) and business model development (Osterwalder and Pigneur 2010) to help students identify scalable and repeatable business models. The practice of customer discovery is the forced exercise of talking to real customers and stakeholders to discover customer needs and wants: the product market fit.



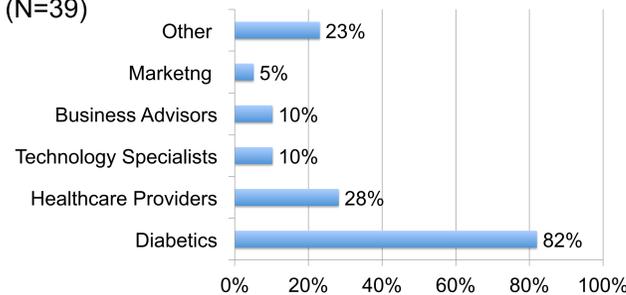
METHODS

- Entrepreneurship students were prompted with a series of open-ended survey questions regarding the launch of a diabetes management system application before and after taking a course using the Lean Launch curriculum.
- Participants included 39 students of various disciplines including: engineering, science, arts and humanities, and social science.
- Student response were coded and categorized based on recurring themes.
- Data analysis was conducted in Microsoft Excel to calculate the frequency of particular responses.
- This poster presents preliminary findings, representing student knowledge of the customer discovery process prior to taking the entrepreneurship course. Post data has been collected, but has yet to be analyzed.

WHO?

You have been tasked with evaluating whether or not this app should be brought to market by the company. Describe who you would speak to.

Figure 1: Stakeholders that Students Would Contact (N=39)

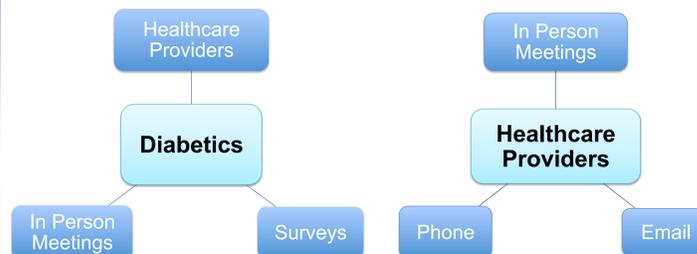


The majority of students (82%) recognized the importance of consulting their target audience (diabetics) to determine the viability the app.

HOW?

How would you make contact with them?

Figure 2: Examples of Strategies to Contact Potential Stakeholders (N=39)

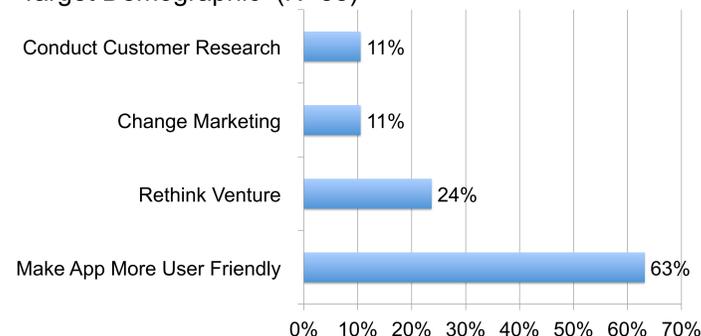


Students indicated that they would most likely contact diabetics through healthcare providers (doctors, medical facilities etc.), in person meetings, or surveys. Healthcare providers were most likely to be contacted in person, by phone, or by email.

INFLUENCE OF ADDITIONAL INFORMATION?

In speaking with potential users, you discover that the majority of diabetic patients are over the age of 60. Describe how this might influence your company's next steps with the app.

Figure 3: How Students Would Respond to New Target Demographic (N=38)



WHY?

Why would you want to speak to these people?

Table 1: Respondent Reasons for Contacting Stakeholders (N=39)

Stakeholder	Reason to Contact
Diabetics	Gather Feedback from Target Audience
Healthcare Providers	Gather Feedback and Seek Medical Professional Expertise
Business Advisors	Learn How to Best Market and Sell the App
Technology Specialists	Determine the Feasibility of Application

Students indicated that getting feedback from potential customers (diabetics and healthcare providers), business advisors, and app developers was essential prior to launching a new venture.

NEXT STEPS?

An elderly woman is having trouble managing her diabetes. Describe at least five steps you would take to determine if this cellphone app would be a potential solution for her problem.

Table 2: Top 5 Steps Students would Take to Determine if the Product is a Viable Solution (N=38)

Top 5 Steps
1. Ask if diabetic has a cell phone
2. Determine her current diabetes management system
3. Assess her comfort with technology
4. Demonstrate/Explain the App
5. Ask about the usefulness of the app for the diabetic

Students were primarily concerned that their customer might not have access to a smartphone

PRELIMINARY FINDINGS

- Students possess a clear awareness of who product stakeholders might be and reasons for contacting them prior to taking the entrepreneurship course. However, students seem to be less certain regarding how to make connections with potential customers beyond attempting to make contact in person, by phone, and email.
- In determining the usefulness of the diabetes management app for an elderly person, students were mindful to consider issues of product accessibility and customer comfort with technology.
- Prior to the entrepreneurship course, the majority of students (63%) indicated that they would likely make adjustments to the app to accommodate the needs of their new customer demographic. However, only 11% of students mentioned conducting customer research of that particular demographic to inform product adjustments.

PROJECT NEXT STEPS

- Complete the analysis of the pre and post-survey data
- Compare student responses across cohorts (College of Engineering, School of Music, and School of Public Health)
- Examine the qualitative results in relation to the quantitative results measuring entrepreneurial self-efficacy and behavior.

REFERENCES

- Blank, S., & Dorf, B. (2012b). *The Startup Owner's Manual: The Step-by-Step Guide for Building a Great Company*
- Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation*.

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