

LEAN EXPERIMENTATION IN ACTION

A Concise Guide to Validating
Product Ideas and Avoiding Failure

KYLIE CASTELLAW & MARYAM AIDINI

Table of Contents

Preface Why you should care about lean experimentation	2
Chapter 1 What is lean experimentation?	5
Chapter 2 Uncovering assumptions that could kill your product	8
Chapter 3 Running lean experiments	15
Chapter 4 Interpreting results and moving on	28
Chapter 5 Addressing concerns with lean product experimentation	34
Conclusion Making lean experimentation your own	40
Examples Experiment ideas	41
Templates Tools to get you started	56
About the authors	64
Acknowledgments	65
Where to learn more	66
Feedback Be part of our lean experiment!	68

Chapter 1: What is lean experimentation?

When we say “lean experimentation”, we mean any quick and cheap way to help predict if a specific product will deliver its anticipated value. And if it turns out that it won’t deliver that value, this method will help you learn what could.

The word **lean** is being thrown around Silicon Valley and the tech industry a lot lately, and for important reason. Companies and practitioners got used to spending a lot of money and time on projects that ended up failing in the market, a practice that rarely turned out to be good for the bottom line. When business was booming, failure was manageable because another idea could save the day, but now many companies are needing to tighten their belts and get smart about how to do more with less. And that sort of “doing more with less” can be roughly translated to “lean” as shorthand. Now doing more with less doesn’t mean building a bigger or more complex system with fewer people; it means **LEARNING** more with less effort and

time in order to make more educated decisions about investments in any product.

The word **experimentation** tends to conjure pictures of scientists in lab coats meticulously measuring results in petri dishes. In our case, we're not taking experimentation quite so literally, but rather to take some of the powerful concepts from it and make them accessible to a wider audience for use in the product creation space. We fully believe in the power of complete variable isolation, external peer reviews, and statistical analyses, but the "lean" in **lean experimentation** doesn't necessarily need those bits to be useful, especially in the early days of a product when the idea itself needs to be validated. The idea is to be able to find ways to learn more with less, and since science is a process that's focused around learning, it's a powerful tool in the realm of product/project development as well. It also goes hand in hand with modern thinking on business strategy (McGrath & MacMillan, 2009).

To be able to learn via lean experiments, we have identified three main steps that are ideally continuously repeated and iterated upon as a product goes from idea to initial product to mature offer.

- 1) **Uncovering Assumptions:** We'll go over how to uncover assumptions that could kill your product and prioritise which to learn about first.