

# Simulator for Learning Data-Driven Product Management

## Study plan

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### 22 CHAPTERS

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#### 1. Job interview

Key Metrics and Data Concepts in Product Management

You will learn about the basic metrics, the difference between correlation and causation, percentages and percentage points, arithmetic mean, and median.

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#### 2. Soft launch and basic metrics

Introduction to Metrics and Amplitude

The first task from a Chief Product Officer. You will deal with the analytics system Amplitude, calculate the basic metrics of the app, and make the first conclusions about the product and its potential.

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**3.**

## **Analyzing the market and competitors**

While everyone prepares for the launch, you have time to study the market using publicly available data. You will evaluate the audience and download figures of competitor apps and make your conclusions about the target market for the company.

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**4.**

## **Retention**

You will understand the nuances of retention metrics and how it is calculated in Amplitude. You will get the idea of how retention, new users, and active audience are connected. You will create a model for predicting the audience to assess how changes to key metrics impact growth.

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**5.**

## **Product metrics vs growth metrics**

You will find out more about different kinds of metrics, and what they're used for. You will also get information on retention rates for different product categories.

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**6.**

## **Funnel analysis**

The Basis of Product Analytics

You will use cohort analysis and the funnel tool in Amplitude to understand how the changes made in the latest version of the product have affected the key metrics.

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## **7. Statistical Significance**

To compare the metrics of the two versions of the product, it is not enough to calculate them. You must verify whether the change is statistically significant or not. You will learn to apply mathematical formulas to draw relevant conclusions while comparing metrics.

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## **8. Evaluation of New Feature Potential**

Your manager tells you about a new feature, which will be developed soon. You decide to take the initiative and evaluate its potential effect and usage, and to do so, you create a product model to evaluate conversions of the key steps in the funnel.

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## **9. Value Hypothesis and Product Model**

You will learn what a value hypothesis is. Then you will formulate it and build a product model to better understand the product and how it actually works.

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## **10. Experiments are the basis of progress**

You will learn the difference between hypotheses and facts and check your product spidey sense, predicting the results of real experiments. You will learn to design experiments and interpret their results. You will formulate an important hypothesis, check it, and get unexpected results.

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## **11. “Why So?” or Qualitative User Research Methods**

The unexpected results of the experiment have put the confused team in a bind. But you will find a solution by applying qualitative user research methods (interviews, surveys, etc.).

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**12.**

## **Discovering Product Value: Where Do Users Find Value? How Is the Product Used?**

You will learn how to apply a number of frameworks to find the hidden value of a product. You will observe something unexpected—or maybe not. It's all up to you, remember?

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**13.**

## **Tuning the product to its real value**

You will use the insights from the previous chapter to change the product. And who knows where this will lead you?

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**14.**

## **Validate the riskiest hypotheses**

You will have to step into the leader's shoes and make tough choices. At the same time, you will understand why it's so important to manage product risks as early as possible.

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**15.**

## **Growth hypothesis**

You will explore the second key hypothesis while creating a product. You will guess the key distribution channels for well-known services and prioritize the growth hypothesis for the product.

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**16.**

## **ROI**

It's time to deal with marketing analytics. It's simple. It is enough to study the details of the ROI metric and learn how to apply cohort analysis to this task.

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## **17. Target market**

The product is improving, but to make this process meaningful, you need to understand the target market, i.e., who are your users, who are the competitors, and what are the market's dynamics.

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## **18. Buying traffic via advertising networks**

The team begins testing paid traffic acquisition. You will understand how advertising networks work. You will also analyze a number of test ad campaigns, as well as assess the potential for product monetization, deciding whether to invest in a channel or not.

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## **19. ASO (App Store Optimization)**

You will have to create a semantic core for the product, and estimate the amount of potential traffic and competition.

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## **20. Leap of faith**

Despite the progress in many areas, you are far from the goal. The situation is complicated by the fact that the company is running low on cash. To get the next round of investment, you need to change something. You have to use all your accumulated knowledge about the product to make a tough decision.

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## **21. The spike**

The decision you made leads to unexpected results. You have to conduct an investigation using all the skills you have mastered. Who knows where it may take you?

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## **22. The summary**

Resolution of the story. Repetition and consolidation of all the skills and knowledge gained in the training process.

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