

Data-Informed Product Building



Sequoia

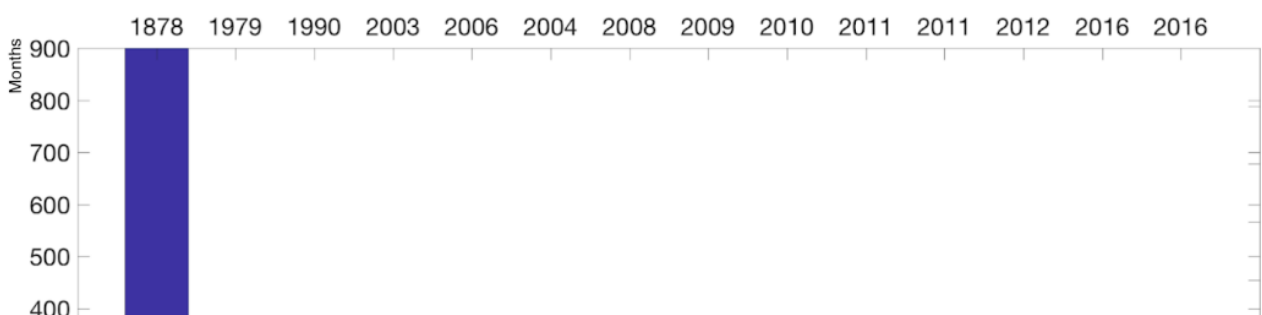
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May 31, 2018 · 5 min read



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As the world changes and ecosystems evolve, companies are growing faster and products are easier to create than ever before. The time it takes a product to reach 100M monthly active users has shortened dramatically (see Figure 1) — and continues to shrink today.



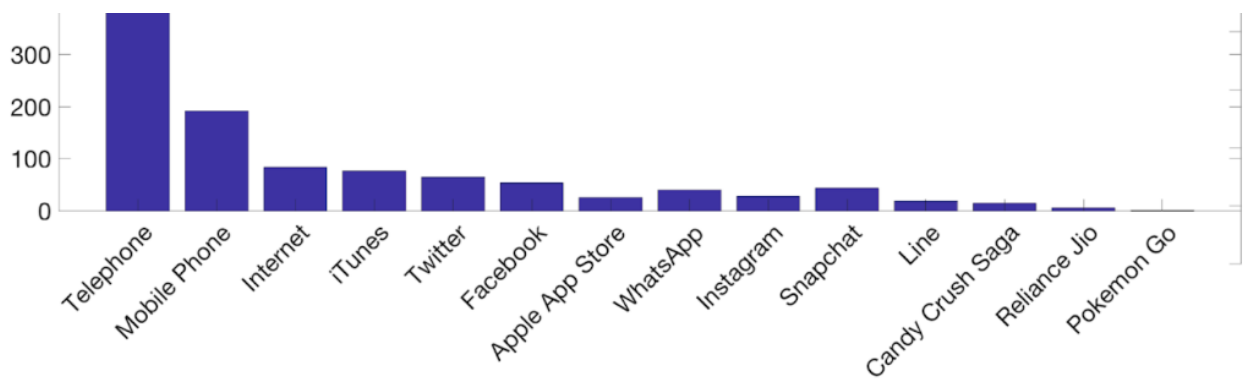


Figure 1

(From Multiple Sources)

The barrier to entry in creating software is decreasing exponentially as more people learn to code. Cloud services are eliminating the need for tedious development and infrastructure maintenance. As predicted by Moore's law, the cost of computation is on the decline. Consumer purchasing power continues to grow. Platforms such as Google, Facebook and Amazon are making it easier to reach target audiences, and app stores make distribution a cinch.

As a result, products are creating more data — and strategically collecting and analyzing that data has never been more important. Analytics and data science are now must-haves, not afterthoughts. They are invaluable not only for “counting numbers” and building dashboards, but for helping define goals, roadmaps and strategies. The success of a company is increasingly dependent on the strength of its data science team.

But despite the indispensable nature of data science, there is a scarcity of literature that explains how to conduct useful product analysis. We intend to help fill this knowledge gap with a series of posts on how to build both data-informed products and world-class data science teams (with particular attention to the consumer space).

Our goal is to give you an understanding of how a product evolves from infancy to maturity; a holistic sense of the product metric ecosystem of growth, engagement and monetization; a framework to define goals for your company; and a toolkit you can use to analyze your product's performance against those goals.

We will offer guidance on the analytical tools, approaches and methods required to build data-informed products. In future posts, we will also cover exploratory analysis, forecasting techniques and machine learning methods — all of which are indispensable in creating product roadmaps and strategies.

In addition, we will provide context on building world-class data science organizations: What is the role of a data scientist? When should you hire them? What skills should they

have?

We plan to share several posts per month for the foreseeable future. This introduction is a living document; the table of contents below will be updated as new posts are published.

In a future series, we will discuss similar themes in the context of marketplaces and enterprise companies.

We hope you find these articles useful, and we welcome your feedback: data-science@sequoiacap.com.

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Check back next week for more updates!

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This work is a product of Sequoia Capital's Data Science team and originally published at www.sequoiacap.com. Jamie Cuffe, Avaniika Narayan, Chandra Narayanan, Hem Wadhar and Jenny Wang contributed to this post. Please email data-science@sequoiacap.com with questions, comments and other feedback.

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