



Beginning Power Apps

The Non-Developer's Guide to
Building Business Applications

—

Second Edition

—

Tim Leung

Apress®

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Reading, UK

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I dedicate this book to you. I want you to achieve whatever goals you want to accomplish, and I trust that Power Apps and this book will help you on your path.

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About the Author



Tim Leung is a software developer with vast experience in designing and building large-scale commercial applications. He is an expert in the fields of rapid application development and the Power Platform. He has published several books on software development, including the first book on Power Apps.

Tim is a Microsoft certified developer and a chartered member of the British Computer Society and holds a degree in information technology.

About the Technical Reviewer



Lee Zuckett has a double degree in astronomy and physics with a minor in mathematics from The Ohio State University. When the idea of heading off to graduate school faded, life opened a door he had not considered, and he started a career working for a small company in Columbus, OH, developing applications in FoxPro (which he still misses!). Lee shortly thereafter moved to the San Francisco Bay area in the mid-1990s, where he continued to work with a couple of small partners and then onto a “start-up” named Avanade for 8 years and Microsoft for another 8 years. Next, he carried out a stint for about a year and a half at Power Objects to run their Call Center - Center of Excellence, before returning to Microsoft.

Over these many years, Lee went from FoxPro to VB 5/6, .NET, web development, architectural design, and a bit of program management, all the while picking up a focus on the call center/customer care area. Somewhere along the line, he was pulled into Dynamics CRM/Dynamics 365 and ultimately to the Power Platform.

Personally, Lee is a big fan of “outdoor” activities, everything from biking (roads and mountains) to skiing, hiking, backpacking, rock climbing, and kayaking. His 13-year-old daughter, Hannah, has been skiing, rock climbing, and biking for quite a while; more recently, his wife and he got her into kayaking and still looking toward a family backpacking trip.

Acknowledgments

I'd like to thank everyone who has worked on this book. I appreciate your hard work and efforts. Notably, I'd like to thank Joan Murray and Jill Balzano at Apress for making this book possible. I'm also very grateful to Lee Zuckett, who has done a great job in reviewing my content and providing me with advice and feedback.

Last but not least, I want to thank Samit Saini and the hundreds of readers who have inspired and supported me. There are too many people to mention, but you know who you are. It is your success that has motivated me to write this second edition.

Foreword



Samit Saini (right) with Microsoft CEO Satya Nadella (left).

Before I became an app builder, I worked as a security officer for 13 years at London Heathrow Airport, which is the United Kingdom's largest and busiest airport, as well as being the busiest airport in Europe.

After I discovered Power Apps, the first edition of this book played an active role in transforming my life. Today, I've built a significantly better life for myself. I now have the flexibility to work from home, which means I can see my kids more. Following the recent Covid pandemic, were it not for Power Apps, I would probably not have a job.

Before this book, I had never read any book on computing. This is the first book that I have ever read cover to cover, and I know the contents very well. Because this book means so much to me, I actually own two copies. I use one copy to scribble my notes, and I've left my second copy intact. Even today, I still often refer to this book because I can find formula references more easily, compared to searching online. Although there are plenty of online blogs and content, the thing I like about this book is that it provides a structured way of learning. This is a format that works very well for me.

Before Power Apps, each mobile app that we commissioned would cost around £60k. If we wanted to make subsequent changes, it would cost even more. With Power Apps, we can now build apps in a much more cost-effective and flexible manner. Not only has it transformed the way we work at Heathrow, it has also transformed the lives and careers of many of my colleagues.

FOREWORD

I am very grateful to the Microsoft Power Apps team and the team at Microsoft for building an application that enables someone like me, with no IT background, to build an app within minutes and to share it with my colleagues. Since building my first app, my growth mindset has improved, and I now have a renewed sense of purpose.

There's no limit to what you can create with new technology. I created a new career.

Samit Saini
(Twitter, SamitSaini01; LinkedIn, Samit Saini)

Introduction

My journey with the Power Platform began in 2015. I was an early adopter of Project Siena, the product that would eventually become Power Apps.

From the very beginning, I saw great potential in Power Apps. Through my work as a software developer, I knew firsthand how difficult it was to build mobile apps that could connect to internal systems and databases. Power Apps offered a straightforward way to achieve this task.

Although Power Apps was aimed at non-developers, I found the initial learning curve steep. Although I had clear ideas of what I wanted to achieve, the intricacies of how to build these features were difficult.

I soon became proficient and started to explore the idea of writing a book. I wanted to share my experiences and to make it easier for users to get started with Power Apps.

At the time, I struggled to secure a publishing deal. It was too much of a risk for publishers to release a book on an unknown product that was at the time still in beta. But fortunately, my editors at Apress believed in my idea, and I was able to write the first edition of this book – which coincided very closely with the initial release of Power Apps.

Today, Power Apps is completely different from the product that existed when I began. It has expanded significantly and offers features that I never would have imagined. This includes the ability to build apps on top of Microsoft Dynamics 365 through model-driven apps and the ability to build publicly accessible, data-driven websites through portal apps. The inclusion of artificial intelligence (AI) is another significant and valuable feature. I applaud all the staff at Microsoft who have contributed toward building this amazing product.

I firmly believe that this momentum will continue. While this book is being released, Microsoft Teams has become hugely popular, and Power Apps is the platform that enables us to build apps that can run in Teams. If you're a beginner, now is a great time to learn Power Apps and the Power Platform. I believe it's a smart way to invest your time, and I'm sure that a positive outcome will occur – if not now, then in the years to come.

I've seen the positive changes that Power Apps can bring to businesses and people. For me, it's given me the satisfaction of being able to help others, to make a positive contribution, and to see businesses and people succeed. Wherever you happen to be on your Power Apps journey, I wish you the best of luck.