

# 第 6 章 CHAPTER 6 案例研究：是什麼讓 Sumo Copilot 成功？ Case Study: What Made Sumo Copilot Successful?

## 便條

### NOTE

免責聲明：Sumo Logic Copilot 是我的第 33 個 AI 使用者體驗專案。在我寫這篇文章的時候，我的團隊剛剛完成了 Copilot GA 版本，客戶似乎真的很喜歡使用這個工具並從中獲得了很多價值，所以如果我聽起來有點興奮，請原諒我。（我保證讓這本書的其餘部分盡可能保持黑暗和壓抑。

Disclaimer: Sumo Logic Copilot was my 33rd UX for AI project. As I am writing this, my team just completed the Copilot GA release, and the customers appear to really enjoy using this tool and get a lot of value out of it, so please forgive me if I sound a bit excited. (I promise to keep the rest of the book as dark and depressing as humanly possible.)

在第 1 部分中，我們討論了為什麼人工智慧驅動的專案經常出錯。有這麼多失敗的方式，是什麼讓 Sumo Logic Copilot 成功？除了擁有出色的開發和 AI 團隊外，該項目的一些 UX 方面也脫穎而出，值得一提。我希望它們能對您自己的工作有所啟發：

In Part 1, we've discussed why AI-driven projects often go wrong. With so many ways to fail, what made Sumo Logic Copilot successful? In addition to having exceptional development and AI teams, some UX aspects of this project also stand out and are worth mentioning. I hope they will be instructive in your own work:

1. 強大的用例 Strong use case
2. 清晰的視野 Clear vision
3. 專用全螢幕使用者介面 Dedicated full-screen UI
4. AI 驅動的自動完成 AI-driven autocomplete
5. 後續步驟建議 Next-steps suggestions

讓我們更詳細地討論這些要點。

Let's discuss each of these points in more detail.

# 強大的用例

## Strong Use Case

在整本書中，您會發現許多人工智慧驅動的專案最重大的失敗之一是缺乏明確的用例，人工智慧可以以切實的方式直接使客戶受益。知道這一點後，當我們一年前開始開發 Copilot 時，我們希望確保用戶的好處是明確且直接的。

Throughout the book, you will find that one of the most significant failings of many AI-driven projects is the lack of a clear use case where AI can directly benefit a customer in a tangible way. Knowing this, when we started work on the Copilot a year ago, we wanted to ensure that the user benefit would be clear and immediate.

任何使用過 Sumo Logic

的人都知道其強大且高效能的日誌搜尋引擎。他們還認識到您需要了解大量 Sumo 查詢語言語法才能釋放所有這些功能和性能。當 ChatGPT 剛問世時，許多客戶嘗試使用它來編寫 Sumo Logic 查詢。不幸的是，大多數 LLM 建議都不起作用——AI 需要在精心挑選的 Sumo Logic 查詢樣本上進行專門訓練，然後才能編寫一些自己的查詢。

Anyone who has worked with Sumo Logic knows its powerful and performant log search engine. They also recognize that you need to know a lot of Sumo Query Language syntax to unlock all this power and performance. When ChatGPT first came out, many customers tried using it to write Sumo Logic queries. Unfortunately, most LLM suggestions did not work—the AI needed to be specially trained on a carefully chosen sample of Sumo Logic queries before it could write some of its own.

正如羅伯特·謝克利 (Robert

Sheckley) 的名言：“要提出正確的問題，你需要知道部分答案” (1)。Sumo Logic Copilot 接受了 2,000 多個自訂查詢的訓練，可以透過視覺化來將結果置於情境中，即使是進階使用者通常也需要一些時間來建立。即使是地理分佈和複雜轉置時間序列等強大的查詢也不再難以建構——您只需用自然語言提出問題，Copilot 就會完成剩下的工作 (見圖 6.1)。使用自然語言查詢 Sumo Logic 可讓非技術使用者、初級第一線開發人員和安全性分析師快速取得所需的資訊 (2)。

As Robert Sheckley famously said, “To ask the right question, you need to know part of the answer” (1). Sumo Logic Copilot was trained on over 2,000 custom queries and can contextualize

results with visualizations that would typically take even a power user some time to build. Even powerful queries such as geographical distributions and complex transpose time series are no longer challenging to construct—you need only to ask a question in a natural language, and Copilot does the rest (see Figure 6.1). Querying Sumo Logic using natural language allows nontechnical users, junior frontline developers, and security analysts to get the information they need quickly (2).



圖 6.1 使用簡單的自然語言命令完成的複雜地理映射查詢

Figure 6.1 Complex Geo mapping query done with a simple natural language command

來源：Sumo Logic

Source: Sumo Logic

## 清晰的視野

## Clear Vision

許多人工智慧驅動的專案是眾所周知的「尋找釘子的錘子」，其中技術能力驅動功能和使用者體驗。相比之下，人工智慧驅動的專案願景是最難確定的事情之一。這通常歸結為“一件事”：您能否闡明您的產品或服務將做的“一件事”，這將是客戶體驗的關鍵差異化因素？(3).

Many AI-driven projects are a proverbial “ hammer in search of a nail, ” where technology capabilities drive the features and user experience. In contrast, AI-driven project vision is one of the hardest things to, ahem, nail down. It often comes down to “ one thing ” : Can you articulate the “ one thing ” that your product or service will do that will be the crucial differentiating factor in the customer experience? (3).

例如，西南航空的“一件事”是“低價航空公司”。因此，當一位有進取心的產品經理提出他們的下一個驚人想法時，團隊可以回顧他們的“一件事”並問道：“在飛行期間為我們的乘客提供手工鹽餅乾上的白鯨魚子醬真的有助於我們成為低價航空公司嗎？因此，決策過程變得相當簡單。

For example, the “ one thing ” for Southwest Airlines is being “ The Low Price Airline. ” So when an enterprising product manager presents their next stupendous idea, the team can refer back to their “ one thing ” and ask, “ Does serving our passenger beluga caviar on artisan salt crackers during the flight really help us be the low price airline? ” Thus the decision-making process becomes considerably simpler.

在 AI

專案中使用這種「一件事」方法非常強大，因為它可以帶來巨大的視覺清晰度。在 Sumo 的 Copilot 專案中，Sumo Logic 的 CPO Tej Redkar 是許多成功人工智慧專案的資深人士，他推動了這一願景。Tej 的“一件事”是“永遠不要讓用戶空手而歸”。這種“一件事”的聲明使團隊能夠自由地設計最佳體驗：專用的全屏 UI、人工智能驅動的自動完成以及與用戶旅程相關的後續步驟建議。這些功能共同確保了有價值的見解易於獲得，並且後續步驟始終觸手可及。

Using this “ one thing ” approach for AI projects is very powerful, because it drives tremendous vision clarity. In Sumo ’ s Copilot project, Sumo Logic ’ s CPO, Tej Redkar, a veteran of many successful AI projects, drives the vision. Tej ’ s “ one thing ” was to “ never let the user leave Sumo empty-handed. ” This “ one thing ” statement allowed the team the freedom to design the best experience: a dedicated full-screen UI, AI-driven autocomplete, and next-steps suggestions contextual to the user journey. Together, these features ensure that valuable insights are easy to get at and that the next steps are always within easy reach.

## 專用全螢幕使用者介面

### Dedicated Full-Screen UI

如下一章所述，許多 Copilot 都設計為使用側邊面板。相較之下，我和我的團隊將 Sumo Copilot 開發為專用的自訂全螢幕體驗，旨在充分利用 Sumo 強大的日誌搜尋和廣泛的資料視覺化功能（見圖 6.2）。簡單來說，日誌、表格、圖表等，包含大量數據——你需要屏幕空間來顯示它！

As discussed in the next chapter, many Copilots are designed to use the side panel. In contrast, my team and I developed Sumo Copilot as a dedicated, custom full-screen experience designed to fully utilize Sumo ' s powerful log search and extensive data visualization capabilities (see Figure 6.2). Simply put, logs, tables, charts, etc., contain a lot of data—you need the screen space to show it!

在測試各種設計選項時，很快就發現，我們的客戶不會採用更便宜、更常見的側面板方法，而是從與 Sumo 強大的日誌搜索引擎交互的全新方式中受益最多：一組專用頁面，Copilot 體驗將在其上展開。因此，我與我們的客戶、專案經理、開發和 AI 團隊合作，使用 RITE 方法設計、徹底研究、測試和驗證了這種專用 Copilot 使用者體驗的各個方面。（我將在第 17 章「新常態：以人工智慧為包容的以使用者為中心的設計流程」中介紹人工智慧驅動產品的「新常態」以使用者為中心的設計流程，並在第 19 章「RITE，人工智慧研究的基石」以及整本書中介紹 RITE。

When testing various design options, it quickly became apparent that rather than taking a cheaper and more common side panel approach, our customers would benefit most from a brand-new way to interact with Sumo ' s powerful log search engine: a dedicated set of pages on which the Copilot experience would unfold. Thus, in partnership with our customers, PM, dev, and AI teams, I have designed, thoroughly researched, tested, and validated every aspect of this dedicated Copilot user experience using RITE methodology. (I will cover this “ new normal ” user-centered design process for AI-driven products in Chapter 17, “ The New Normal: AI-Inclusive User-Centered Design Process ” and RITE in Chapter 19, “ RITE, the Cornerstone of Your AI Research, ” and throughout this book.)

擁有整頁專用體驗為我們提供了以最有效的方式實施自動完成和後續步驟建議所需的螢幕空間，並為我們提供了強大的重述功能的空間，其中 Copilot 將向客戶回應它如何解釋他們的要求，並提供一種簡單的方法來查看 Copilot 創建的 Sumo QL 查詢（更多內容請參閱第 9 章，“LLM 設計模式”）。這使客戶能夠驗證 Copilot 解釋的準確性，並不斷了解更多 Sumo QL，有助於建立信任和長期忠誠度。

Having a full-page dedicated experience allowed us the screen real estate we needed to implement autocomplete and next-steps suggestions in the most effective fashion, as well as giving us the real estate for a powerful restatement feature, where Copilot would echo back to the customer how it interpreted their ask and provide an easy way to see the Sumo QL query the Copilot created (more on this in Chapter 9, “ LLM Design Patterns ” ). This allowed customers to validate the accuracy of the Copilot interpretation and continuously learn more of Sumo QL, helping to build trust and long-term loyalty.

## AI 驅動的自動完成

### AI-Driven Autocomplete

回到我們的“一件事”，Copilot 的主要區別在於我特別自豪的兩個功能：自動完成和後續步驟建議。自動完成作為一個概念已經存在了很長時間。在 Copilot 中，自動完成由強大的 AI 引擎驅動，該引擎可以推薦初始起點、提供自動完成建議，甚至建議來源表達式（斜體）。見圖 6.3。

Referring back to our “one thing,” the main differentiators for the Copilot were two features I take particular pride in: autocomplete and next-steps suggestions. Autocomplete as a concept has been around for a very long time. In the Copilot, the autocomplete is driven by a powerful AI engine that can recommend initial starting points, provide autocomplete suggestions, and even suggest source expressions (in italics). See Figure 6.3.

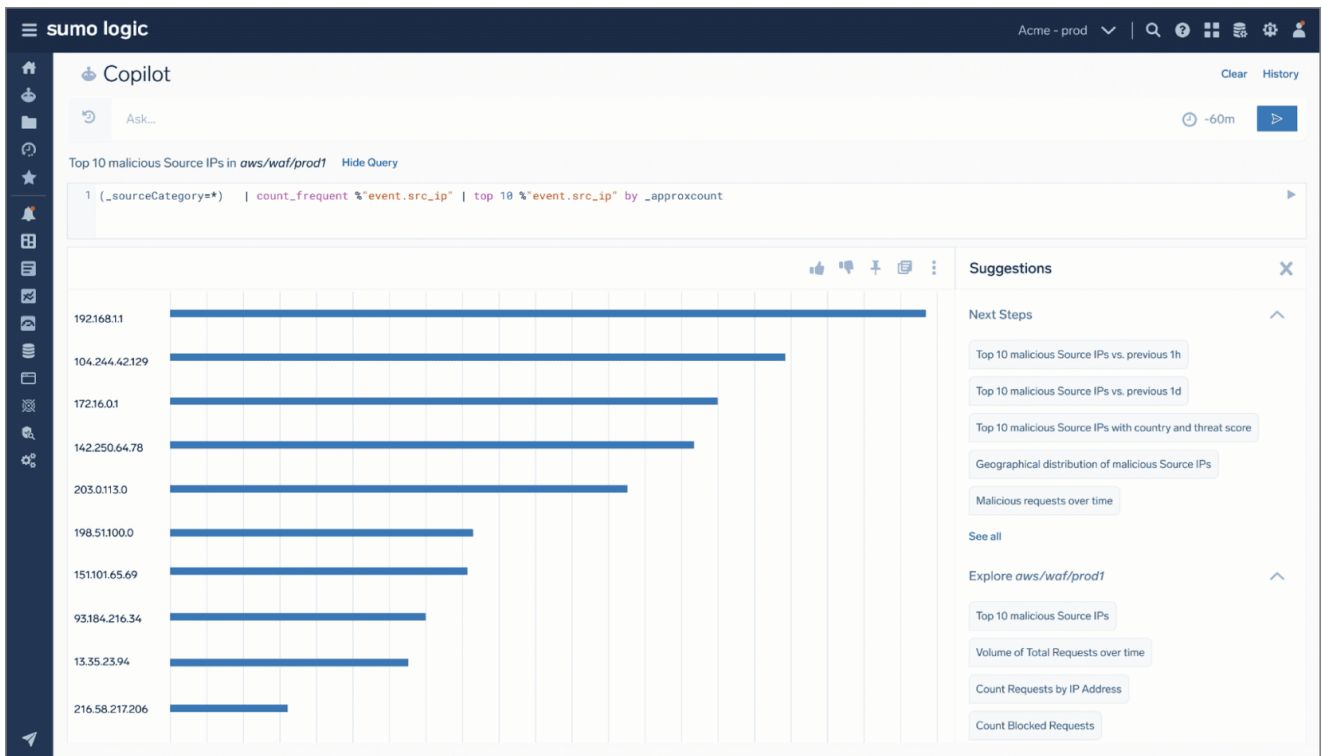


圖 6.2 專用的全螢幕 UI 為我們提供了實現重述和顯示詳細 SumoQL 翻譯所需的空間

Figure 6.2 Dedicated full-screen UI allowed us the room we needed to implement restating and show detailed SumoQL translation

來源：Sumo Logic

Source: Sumo Logic

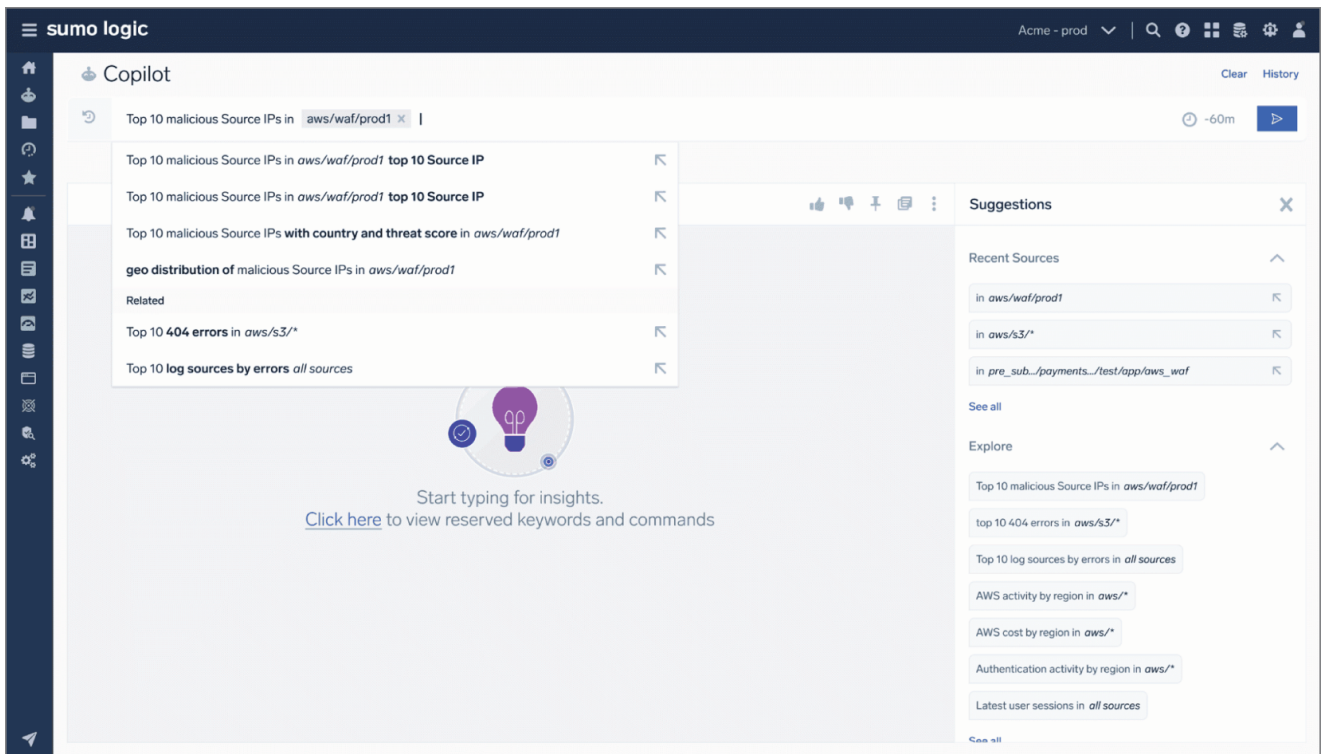


圖 6.3 強大的自動完成功能可協助使用者從一開始就提出正確的問題

Figure 6.3 Powerful autocomplete helps users ask the right question from the start

來源：Sumo Logic

Source: Sumo Logic

請注意自動完成覆蓋中每個建議右側的對角線箭頭：這些箭頭允許用戶在搜索框中填充查詢以進行進一步編輯，而不是始終運行它，從而節省時間和金錢。這些箭頭可讓客戶最大限度地利用自動完成功能（翻譯和執行每個查詢都需要花錢，如果客戶只是嘗試編輯查詢，為什麼還要強迫客戶每次都執行查詢？這些是我和我的團隊能夠添加到該產品中的小而重要的設計細節，以服務於“一件事”：讓客戶走上一條快樂的發現之路（4）。

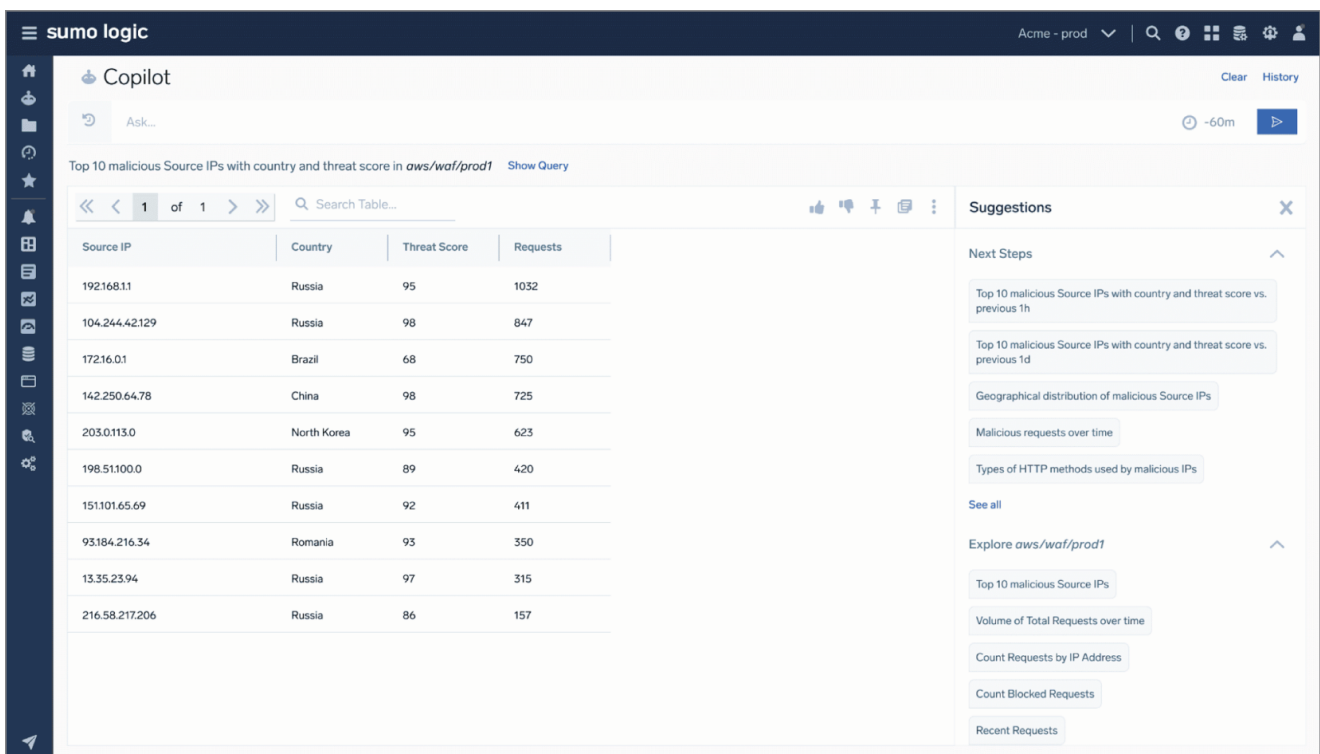
Note the diagonal arrows to the right of each suggestion in the autocomplete overlay: those arrows allow the users to populate the query in the search box for further editing instead of always running it, saving time and money. These arrows allow the customers to make maximum use of the autocomplete feature (it costs money to translate and run each query—why force the customer to run the query every time if they are only trying to edit it?). These are the small but important design touches that my team and I were able to add into this product in service of the “one thing”: putting the customer on a happy path to discovery (4).

## 後續步驟建議

### Next-Steps Suggestions

支持“一件事”願景的第二個關鍵功能是屏幕右側的後續步驟建議（見圖 6.4）。這些不是預先設定的建議，而是由使用者在系統中的旅程驅動的高度客製化的自然語言處理（NLP）查詢。Copilot 旨在回應使用者並不斷向使用者學習，始終努力利用日誌搜尋最佳實踐的行業知識來呈現最有洞察力的探索想法（當然，此功能使用了我無法詳細討論的專有演算法）。

The second key feature that supports the “one thing” vision is the next-steps suggestions on the right side of the screen (see Figure 6.4). Those are not pre-canned suggestions but highly customized natural language processing (NLP) queries driven by the user’s journey through the system. The Copilot is made to respond to and continuously learn from the user, always striving to present the most insightful exploration ideas by leveraging the industry knowledge of log search best practices (naturally this feature is using a proprietary algorithm that I cannot discuss in detail).



The screenshot displays the Sumo Logic Copilot interface. At the top, the header shows "sumo logic" and "Acme - prod". Below the header, the Copilot chat area contains the text "Ask..." and a search icon. The main content area features a table titled "Top 10 malicious Source IPs with country and threat score in `aws/waf/prod1`". The table has four columns: Source IP, Country, Threat Score, and Requests. To the right of the table is a "Suggestions" sidebar with a search bar and a list of suggested queries.

Source IP	Country	Threat Score	Requests
192.168.11	Russia	95	1032
104.244.42.129	Russia	98	847
172.16.0.1	Brazil	68	750
142.250.64.78	China	98	725
203.0.113.0	North Korea	95	623
198.51.100.0	Russia	89	420
151.101.65.69	Russia	92	411
93.184.216.34	Romania	93	350
13.35.23.94	Russia	97	315
216.58.217.206	Russia	86	157

The "Suggestions" sidebar includes the following items:

- Next Steps
- Top 10 malicious Source IPs with country and threat score vs. previous 1h
- Top 10 malicious Source IPs with country and threat score vs. previous 1d
- Geographical distribution of malicious Source IPs
- Malicious requests over time
- Types of HTTP methods used by malicious IPs
- See all
- Explore `aws/waf/prod1`
- Top 10 malicious Source IPs
- Volume of Total Requests over time
- Count Requests by IP Address
- Count Blocked Requests
- Recent Requests

圖 6.4 後續步驟建議回應使用者在系統中的旅程

Figure 6.4 Next-steps suggestions respond to the user’s journey through the system

來源：Sumo Logic

Source: Sumo Logic

## 最後的話

### Final Words

正如我在第 1 章中討論的那樣，整整 85% 的人工智慧驅動專案都會失敗，因此從一開始就對您不利。為了取得成功，人工智慧實踐使用者體驗的所有各個部分必須結合在一起。我希望這個案例研究有助於證明使用本書中的技術，您可以交付自己的成功人工智慧驅動專案。

As I discussed in Chapter 1, a full 85 percent of AI-driven projects fail, so the odds are stacked against you from the start. To succeed, all the various parts of UX for AI practice must come together. I hope this case study helps demonstrate that using techniques in this book, you can deliver your own successful AI-driven project.

Sumo Logic Copilot 的成功很大程度上歸功於出色的開發和人工智慧團隊。除了卓越的技術之外，專案成功的關鍵因素還有：

Sumo Logic Copilot was a success due in large part to fantastic development and AI teams. In addition to technical excellence, the key factors contributing to project success were:

1. 強大的用例 Strong use case
2. 清晰的視野 Clear vision
3. 專用全螢幕使用者介面 Dedicated full-screen UI
4. AI 驅動的自動完成 AI-driven autocomplete
5. 後續步驟建議 Next-steps suggestions

另一方面，Copilot 專案可能做得更好的事情是.....（接第808頁）

On the other hand, things that might have gone better with the Copilot project are ... (Continued on page 808)

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