March 23, 2022

Stephen N. Cannon Chief Executive Officer Archimedes Tech Spac Partners Co. 2093 Philadelphia Pike #1968 Claymont, DE 19703

Re: Archimedes Tech Spac Partners Co. Registration Statement on Form S-4 2022 Filed March 10, File No. 333-262094

Dear Mr. Cannon:

We have reviewed your amended registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response. After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our March 3, 2022 letter. Amendment No. 2 to Registration Statement on Form S-4 Management's Discussion and Analysis of Financial Condition and Results of Operations of SoundHound Factors Affecting Our Operating Results, page 148 We note your revised 1. disclosure in response to prior comment 3 explaining what you consider to be customer retention. You indicate that you consider revenue to be recurring if your customer contract does not terminate the relationship and you continue to provide the customer with the same or other services in the subsequent year. Please refrain from referring to this revenue as recurring when it appears that you are describing customer retention. Stephen N. Cannon Archimedes Tech Spac Partners Co. March 23, 2022 Page 2 Results of Operations, page 151 In your discussion of the changes in revenue by geographic location, you 2. refer to the overall trend of international growth in Germany. However, we note that the increase in revenue in Germany was due to a one-time contract modification to end a distinct professional service contract prior to completion. Please clarify your disclosure. Unaudited Pro Forma Condensed Combined Financial Information, page 162

3. We note that you have assumed maximum redemptions. Tell us how you determined you

will meet the minimum cash requirements provided in the merger agreement based on the balance of pro forma cash assuming maximum redemptions. You may contact Melissa Walsh, Senior Staff Accountant, at (202) 551-3224 or Stephen Krikorian, Accounting Branch Chief, at (202) 551-3488 if you have questions regarding comments on the financial statements and related matters. Please contact Matthew Crispino, Staff Attorney, at (202) 551-3456 or Jan Woo, Legal Branch Chief, at (202) 551-3453 with any other questions.

FirstName LastNameStephen N. Cannon

Sincerely,

Division of

Corporation Finance Comapany NameArchimedes Tech Spac Partners Co.

March 23, 2022 Page 2 cc: Giovanni Caruso FirstName LastName Office of Technology