



ANGEL CAPITAL ASSOCIATION

ACA Data Insights What We Learned From Our Data

In support of ACA's Data Insights initiative, once a month we will be sharing charts illustrating useful learnings from analyzing data on angel investing and portfolio returns.

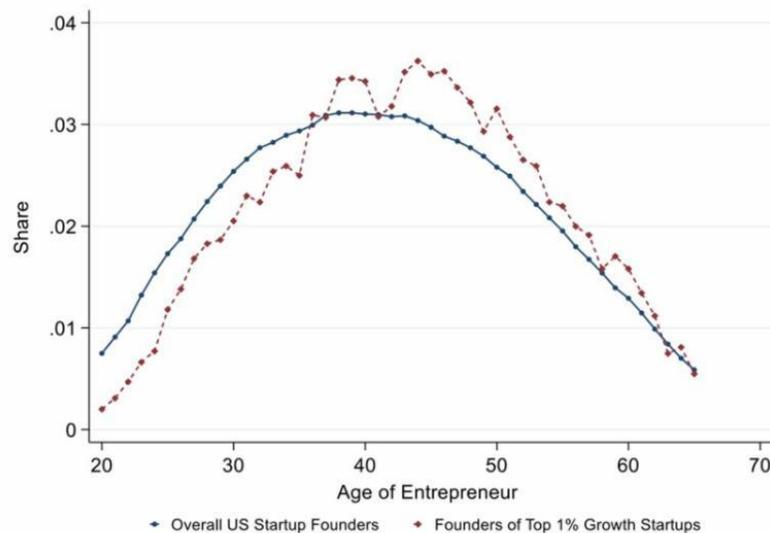
We all embrace the idea that great start-ups are more likely to come from young entrepreneurs – but is that true? According to data analysis, the answer is **NO**:

“A 50-year-old founder is 1.8 times more likely to achieve upper-tail growth than a 30-year-old founder. Founders in their early 20s have the lowest likelihood of successful exit or creating a 1 in 1,000 top growth firm.”

*That’s the conclusion according to analysis done by MIT-Sloan economist Pierre Azoulay along with Benjamin Jones of Northwestern-Kellogg, J. Daniel Kim of the University of Pennsylvania-Wharton, and Javier Miranda of the U.S. Bureau of the Census. It is all documented in their paper published in 2019 called “**Age and High-Growth Entrepreneurship**” – [click here](#) for the full paper. Here are some more highlights:*

“Across the 2.7 million founders in the U.S. between 2007-2014 who started companies that go on to hire at least one employee, the mean age for the entrepreneurs at founding is 41.9. The mean founder age for the 1 in 1,000 highest growth new ventures is 45.0”

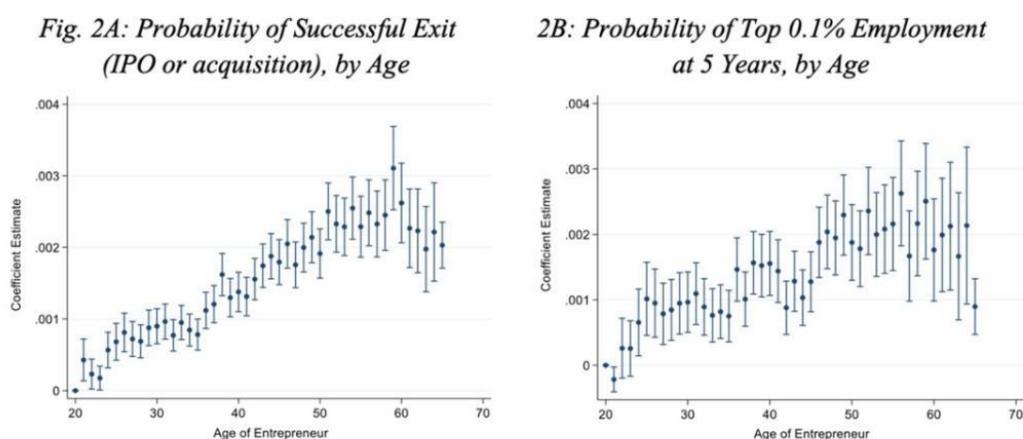
Figure 1: Founder Age Distribution: All Startups and High Growth Startups



Source: **Age and High-Growth Entrepreneurship** by Pierre Azoulay (MIT-Sloan), Benjamin Jones (Northwestern University-Kellogg), J. Daniel Kim (University of Pennsylvania-Wharton), and Javier Miranda (U.S. Census Bureau), 2019

The probability of successful exit goes up with the age of the founder:

Figure 2: Likelihood of Extreme Success, Conditional on Starting a Firm



Source: **Age and High-Growth Entrepreneurship** by Pierre Azoulay (MIT-Sloan), Benjamin Jones (Northwestern University-Kellogg), J. Daniel Kim (University of Pennsylvania-Wharton), and Javier Miranda (U.S. Census Bureau), 2019

THE TAKEAWAY

The findings are similar when considering high-technology sectors, entrepreneurial hubs, and successful firm exits. Prior experience in the specific industry predicts much greater rates of entrepreneurial success.

Why?

Yes, young people are potentially sharper cognitively, less distracted by family or other responsibilities, and more capable of transformative ideas. But older entrepreneurs often have experience in addition to greater access to human capital, social capital, or financial capital. It is true that young people can create great companies (Apple, Microsoft, Amazon, Google, Facebook, etc.), but they **also make mistakes and the same**

entrepreneur is often even more successful after having processed those learnings. For instance, even a great entrepreneur such as Steve Jobs made some big mistakes (as we all have) early on in his career:

- After leaving Apple in 1985, Jobs started Next to create a high-end \$6500 (\$14,000 in today's dollars) NeXTcube workstation for students/universities who couldn't afford it. Then in the late 1980s at Next, Jobs rejected IBM's inquiry to replace Microsoft Windows with the NeXTSTEP OS if Next agreed to drop its aspirations to make hardware. Later Next failed on the hardware side, although NeXTSTEP OS eventually was transformed into MacOS after Apple acquired it.
- In 1988, Jobs ordered that John Lasseter and his small content team at Pixar be let go because the company needed to focus on selling software rather than making content using that software. The manager ignored Jobs' directive since one of Pixar's first shorts (Tin Toy) was nominated for an Oscar, and the win within weeks put Pixar on the map. Jobs then saw the potential, reversed course and embraced a content future for Pixar – fortunately Lasseter stayed on to make that happen.

In another example, Ford Motor Company was the third car company founded by Henry Ford – the first two failed.

Back to the Sloan/Kellogg/Wharton study, they observed that the most successful young entrepreneurs actually “peaked” later in their careers when looking at the relationship between age and growth in market valuation. Steve Jobs peaked at Apple at age 48 (iPhone released at age 52), Bill Gates peaked at Microsoft at age 39, Jeff Bezos peaked at Amazon at age 45 (after expanding beyond books into all retail and AWS), and Sergei Brin and Larry Page peaked at Google at age 36 (as Google perfected its paid search product and business model). Elon Musk didn't become CEO of Tesla until age 36, and the acceleration of Tesla's market valuation did not come until he was well into his 40s.

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