## Broken Breakout Promises

Before co-founding Apple in April 1976, Steve Jobs was one of the first 50 employees at Atari, the legendary Silicon Valley game company founded by Nolan Kay Bushnell in 1972. Atari's Pong, a simple electronic version of ping-pong, had caught on like wildfire in arcades and homes across the country, and Bushnell was anxious to come up with a successor. He envisioned a variation on Pong called Breakout, in which the player bounced a ball off a paddle at the bottom of the screen in an attempt to smash the bricks in a wall at the top.

Bushnell turned to Jobs, a technician, to design the circuitry. Initially Jobs tried to do the work himself, but soon realized he was in way over his head and asked his friend Steve Wozniak to bail him out. "Steve wasn't capable of designing anything that complex. He came To make ends meet in the summer of 1972, Woz, Jobs, and Jobs' girlfriend took \$3-per-hour jobs at the Westgate Mall in San Jose, California, dressing up as *Alice In Wonderland* characters. Jobs and Woz alternated as the White Rabbit and the Mad Hatter.



Conceived by Bushnell, Breakout was originally designed by Wozniak and Jobs.

"He was the only person I met who knew more about electronics than me." Steve Jobs, explaining his initial fascination with Woz

"Steve didn't know very much about electronics." Steve Wozniak Nolan Bushnell went on to found the Chuck E. Cheese Pizza Time Theater restaurant chain and PlayNet Technologies—a maker of pay-per-play Internet games for bars, restaurants, and hotels—which filed to liquidate itself in June 1998.

"Steve [Jobs] will use anybody to his own advantage. He will say one thing and anybody who heard it would think that he was saying 'Maybe yes' or 'Maybe no.' You could never tell what he was thinking."

## Steve Wozniak

Ironically, Woz's design for Breakout was so brilliant that none of the Atari engineers could figure out exactly how it worked, which made it impossible to test, so the whole thing had to be redesigned in-house before it shipped. to me and said Atari would like a game and described how it would work," recalls Wozniak. "There was a catch: I had to do it in four days. In retrospect, I think it was because Steve needed the money to buy into a farm up north."

Designing a complex game in such a short period of time was a challenge, so even though Wozniak was working full-time at Hewlett-Packard, he and Jobs put in four all-nighters in a row and finished a working prototype. Both came down with mononucleosis as a result, yet Woz remembers it as an incredible experience. "I was so proud of designing a product like that," recalls Wozniak. "Nolan Bushnell wanted a game with as few chips as possible. Steve said if there were less than 50 chips, we got paid \$700 and split it in half. Less than 40 chips, \$1,000. After four nights, it was 42 chips. I wasn't about to spend another second trying to reduce it by two more chips; I'll settle for \$700."

After delivering the game to Atari, Jobs put off paying Woz, explaining that there was some problem getting the money, but he finally wrote a check for \$350 and immediately split for the All-One Farm in Oregon. Jobs was happy because his friend had helped him get in good with his boss. Bushnell was thrilled because Breakout was designed in record time and used so few chips. Woz was happy earning some pocket money doing what he loved best. "I would have done it for a quarter," says Wozniak.

It wasn't until 1984 that Woz discovered the unpleasant truth about the Breakout project and his "good friend," Steve Jobs. "I was on a plane going to a user group club in Fort Lauderdale to promote the Mac, along with some other members of the Mac team," recalls Wozniak. "Andy Hertzfeld had just read *Zap!*, a book about Atari which said that Steve Jobs designed Breakout. I explained to him that we both worked on it and got paid \$700. Andy corrected me, 'No, it says here it was \$5,000.' When I read in the book how Nolan Bushnell had actually paid Steve \$5,000, I just cried."

It wasn't the money that bothered Woz. Had Jobs asked, Wozniak would have done the project for free because he was turned on by such technological challenges. What hurt was being misled by his friend. Looking back on the incident, Wozniak realized Jobs' behavior was completely in character. "Steve had worked in surplus electronics and said if you can buy a part for 30 cents and sell it to this guy at the surplus store for \$6, you don't have to tell him what you paid for it. It's worth \$6 to the guy. And that was his philosophy of running a business," says Wozniak.