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Office of the Select Board
Town of Arlington
730 Massachusetts Avenue
Arlington, MA 02476

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Dear Members of the Select Board,

I'd be willing to wager that you have a spreadsheet open on your computer now, or that you have within the last week. Whether it's Microsoft Excel, or Google Sheets, Apple Numbers, or something else entirely, spreadsheets are a part of daily life.

And: it all started at 231 Broadway! (More or less.)

I should provide a bit of context. VisiCalc was the first-ever spreadsheet application for the personal computer. More than that, it was the original "killer app" that drove adoption of the PC and, specifically, the legendary Apple II. It spawned countless imitations that are used, developed and iterated on to this day. Despite some flaws, digital spreadsheets are arguably the most important business tool existing: it has been convincingly estimated that a majority of businesses use spreadsheets, and around one billion users worldwide have tried them.^{1 2}

But none of that was true in 1978, when, while studying at Harvard Business School, Dan Bricklin imagined a way to manipulate business data seamlessly:

Sitting in Aldrich Hall, room 108, I would daydream...["I imagine if I had a heads-up display, like in a fighter plane, where I could see the virtual image hanging in the air in front of me. I could just move my mouse/keyboard calculator around on the table, punch in a few numbers, circle them to get a sum, do some calculations, and answer '10% will be fine!'" (10% was always the answer in those days when we couldn't do very complicated calculations...)]

The summer of 1978, between first and second year of the MBA program, while riding a bike along a path on Martha's Vineyard, I decided that I wanted to pursue this idea and create a real product to sell after I graduated.

Dan Bricklin, "The Idea" (<http://danbricklin.com/history/saiidea.htm>)

Over the next year, Bricklin and his friend Bob Frankston turned this vision into VisiCalc – all in the attic of Frankston's Arlington apartment at 231 Broadway.

¹ Scott Max, Excel Statistics (<https://scottmax.com/excel-statistics/>)

² Hjalmar Gislason, Excel vs. Google Sheets usage — nature and numbers (<https://medium.grid.is/excel-vs-google-sheets-usage-nature-and-numbers-9dfa5d1cadbd>)

It is hard to overstate the rapid impact of VisiCalc's release. What had been a tedious, manual process of erasure and recalculation on paper became instantaneous; spreadsheet users became star employees. A 1984 article in *Harper's Magazine* relays an anecdote about Theodore Stein, an employee at the Connecticut Mutual Life Insurance Company who thrived by being early to learn:

[Connecticut Mutual's] chief financial officer wanted certain information, and his top "experts" had difficulty providing it. So one weekend he brought an Apple computer and a copy of VisiCalc home with him. Monday morning, he called his people in and showed them how he had gotten the information he had been clamoring for. "With one swipe of the diskette, he cut them off at the knees." Stein said. "He out-teched them. His experts! He'd cut the chain. The following week, they all came down to learn VisiCalc – fast."

Steven Levy, "A Spreadsheet Way of Knowledge." *Harper's Magazine*, November 1984.

It is easy to find similar stories. Spreadsheet users could try new formulas, experiment, play with data and plan. They felt more effective and capable; they prospered professionally. Steve Jobs saw the spreadsheet, and VisiCalc specifically, as an "explosion" that "propelled the Apple II to the success that it achieved."³ Some even celebrate "Spreadsheet Day" on October 17th, the day of VisiCalc's release.

VisiCalc didn't stay on top, even while the spreadsheet did. Bricklin and Frankston chose not to patent the technology (software patents were unusual, expensive and difficult to obtain at the time⁴) and large incumbents like Microsoft and IBM entered the market with clones like Multiplan and the hugely successful Lotus 1-2-3. By 1988, the New York Times mused that "[Lotus] 1-2-3 [had] toppled the first spreadsheet, Visicalc, whose dominant share of the personal computer market seemed invincible after its introduction in 1978."⁵ 1-2-3 in turn was dethroned by Excel, which is today challenged by cloud offerings like Google Sheets - and so on. But the legacy of VisiCalc is intact, and important. (One fan even created a working VisiCalc clone *within* Google Sheets!)⁶

I believe Arlington should honor this history. While VisiCalc didn't have the unique impact on historical Arlington's *local* economy that, for instance, Captain Cooke's Grist Mill or Schwamb Mill did (both of which are subject to contemporary commemoration efforts) it had a profound and lasting effect on the rest of the country and the world. I have a few ideas:

- A Town proclamation in honor of Spreadsheet Day.
- A physical plaque near 231 Broadway - perhaps even one formatted to mimic a spreadsheet!
- A part of the history section of the Arlington town website describing VisiCalc and its legacy.

³Interview with Steve Jobs, 1996 | Shin-Denshi Rikkoku, Society and Computer (https://www.youtube.com/watch?v=IU96Pd_npn4)

⁴Dan Bricklin, Patenting Visicalc (<http://www.bricklin.com/patenting.htm>)

⁵Peter H. Lewis, "THE EXECUTIVE COMPUTER; Lotus 1-2-3 Faces Up to the Upstarts" New York Times, March 13, 1988.

⁶Martin Hawksey, "VisiCalc Returns! Tribute to VisiCalc inside Google Sheets made with Apps Script" (<https://pulse.appscript.info/p/2023/04/visicalc-returns-tribute-to-visicalc-inside-google-sheets-made-with-apps-script/>)

It would be my pleasure to contribute in whatever way would be most useful to this commemoration project. Provided the Town is open to the idea in general, I would aim to raise private dollars to cover the cost of a plaque so no Town funds would be required. And I would volunteer to write any needed copy for the website or proclamation.

I hope the Select Board - and ultimately the rest of Town! - will join me in my excitement for this underappreciated element of Arlington history. And I look forward to discussing the matter further at your convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Selker". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Paul Selker.