



David Peterson
Chief Innovation Officer

What To Do With Failed Glue?

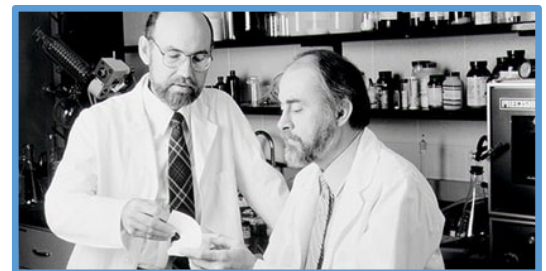
The year was 1968. 3M scientist Dr. Spencer Silver was in the laboratory working diligently, experiment after experiment, with the goal of coming up with a formula for a new strong adhesive. In the process, he discovered something unusual in one of the failed attempts: an adhesive that stuck lightly to surfaces but didn't bond tightly to them. What Silver had discovered was something called "microspheres" which retain their stickiness but with a "removability characteristic," allowing attached surfaces to peel apart easily. Moreover, this adhesive would retain its weak "stickiness" and be reused multiple times. But his job was to find "strong" glue, not "weak" glue. There was no commercial market for weak glue.

For years, even as he continued pursuing the goal of discovering strong glue, Dr. Silver never gave up on the idea that the microsphere glue would have a commercial purpose. He just had no ideas that represented a commercial use for his invention. To that end (and at every opportunity), Dr. Silver would tout the merits of his creation to colleagues. You can probably imagine how this conversation would go around the lunchroom crowd of scientists. I'm sure it was a tough crowd and he absorbed some good-natured banter about his glue but Dr. Silver was nothing if not persistent that this weak glue had commercial value.

Fast forward to 1974. Art Fry, another 3M scientist, had a problem. Every Wednesday night while practicing with his church choir, he would use little scraps of paper to mark the hymns they were going to sing in the upcoming service. By Sunday, he'd find that they'd all fallen out of the hymnal. He needed a bookmark that would stick to the paper without damaging the pages. Thinking back to a seminar he'd attended on Silver's microspheres, he had what he now refers to as his "Eureka!" moment. Partnering with Silver, they began developing a product. Once they found themselves writing messages on their new notes to communicate around the office, they realized the full potential of the idea. Said Fry, "I thought, what we have here isn't just a bookmark, it's a whole new way to communicate."

Fry decided to make the 3M corporate headquarters his test market for the new notes with the "weak glue". Fry supplied the entire company with the new adhesive notes. Employees loved them! The 3M marketing team decided to put the product directly into consumers' hands. The massive sampling effort was a runaway success. Ninety percent of those who tried the product said they'd buy it. The notes became an overnight success. According to Dr. Silver, "It was always a self-advertising product because customers would put the notes on documents they sent to others, arousing the recipient's curiosity. They would look at it, peel it off and play with it, and then go out and buy a pad for themselves. Silver continued, "Like many ground-breaking innovations, theirs was a product nobody thought they needed until they did."

In 1980, on April 6, Silver and Fry's unsung hero of failed glue on note paper debuted in U.S. stores as Post-it® Notes. Its' now iconic Canary Yellow color was chosen by happenstance - the lab next door happened to only have scrap yellow paper on hand. The product has seen explosive growth across domestic and international markets. 50 billion post-it-notes are created by 3M every year. There are dozens of note shapes (I personally wouldn't know what to do as a strategic planning facilitator without Post-It



Dr. Spencer Silver and Art Fry in the 3M lab.
(Why are all the really smart ones balding with a mustache and beard?)

Flipcharts). There are over 75 different colors available. The success of Post-it-Notes is so massive that that segment of 3M alone represents over 13% of 3M's total revenue (you can look it up, it's a big number). 3M still has 77% of the global market of all post-it type products. To call it anything other than a monumental success would be a monumental understatement. After 28 years with the company, Spencer Silver, co-founder of Post-it® Notes, retired from 3M with more than 22 US patents to his name. Both he and Dr. Fry were celebrated within 3M with honors galore.

OK, interesting story but as a financial services executive, how does this relate to me?

The key elements to this story is a) that the success was borne out of failure and b) it was recognized as having a value unrelated to its original purpose. Let's recap: Silver was trying to invent a strong glue. The microsphere glue was certainly not a strong glue. His boss could have said "Hey, stop screwing around with that failed glue, we need strong glue!" Or maybe his failure would have led to his employment being terminated. Certainly not out of the realm of possibility but if that happened, is it possible that 3M never invents Post-it-Notes? Since he ended up with 22 patents, I am guessing that Dr. Silver did ultimately create a strong glue or two for 3M. But he didn't give up on his "failure". While he himself had no clue as to what the commercial usage could be, he did do something really important. He advocated for his idea with his colleagues. Persistently tried to get someone, anyone to look at this substance as something commercially viable. With no success.

Now let's turn our attention to Dr. Fry. He finds a "need"; he needs paper to not fall out of his hymnal. He remembers Silver going on and on about this microsphere glue. Eureka! Now suppose that Dr. Silver had never advocated for his failure. Maybe Fry never hears about it, never circles back SIX YEARS LATER and asks about "that glue". There was no industry need for weak glue attached to note paper. It was Fry's own "need" that generated the impetus for Fry to connect with Silver. The combination of the serendipitous invention of Silver and the connection of the unmet need to the invention by Fry that created success beyond anyone's expectation.

Here's my question to you –

How willing are you to allow your staff to experience a failure? Are you rewarding failure? I am talking about a failure in innovation ("exploring a new social media platform that goes bust") as opposed to an error in execution ("a teller cannot keep his drawer balanced"). There are many changes underway in our industry. We are going to have to get innovative to face the challenges that the coming years will bring, not the least of which is changing customer demographics. How our future customers look at services like checking accounts and the models for how they are consumed and priced (monthly service charges) will need to change. You only need to look at the current attack on overdraft fees to see how this dynamic is playing out in real time. How are you innovating, encouraging employees across the enterprise to think of and articulate ideas, even crazy ones? Are you encouraging Dr. Silvers across your whole organization?

Further, how are you allowing ideas to be shared across the bank? Is there an open forum for those with ideas to advocate for their ideas, without recrimination? You may think that allowing crazy ideas to be floated across the employee base is dangerous, but my take is that it is essential. You are not going to act on a truly crazy idea. However, the crazy idea, if allowed to be advocated might just trigger someone from a completely different part of the bank to say, "Hey, I know of how we might could use that idea". It's the equivalent of Art Fry and the hymnal: until you foster an open marketplace of ideas, you literally could have gold goose ideas languishing and market opportunities going unfulfilled due to the lack of a solution. Fostering Dr. Silver and Art Fry attitudes across your organization is essential to getting all ideas on the table and circulated. And you must also have patience. Your "Eureka" moment might be years down the road. Persist. Consistently, but professionally, push your people to come up with ideas and eventually something will pop that allows you to dramatically innovate in how you provide financial services.

This innovation attitude that I am advocating is not natural for the financial services industry. But I believe that the next 5 to 8 years will be crucial for traditional banks to pivot and become a valued and trusted partner for tomorrow's customers. I welcome your comments and questions about how FNBB is working on services and solutions to assist your institution in doing just that. You can reach me at dpeterson@bankers-bank.com or 225-231-5032. For more information on the history of 3M's Post-it-Notes, click here - https://www.post-it.com/3M/en_US/post-it/contact-us/about-us/.