If It Ain't Broke, Let's Break It!

by a member of the OT Club

Some of the recent FAE Confidential columns have discussed the changes in the semiconductor industry that occurred when finance people or "professional managers" took over the business. After the rise of the dot-com companies, this takeover started in earnest. In the previous columns, the OT Club discussed how finance dictated changes in the roles of semiconductor field application engineers (FAEs), but they also had an impact on the in-house application engineers who respond to customer inquiries. This is something I witnessed during a stint at a major semiconductor company. This falls into the category of something you just cannot believe unless you lived it. We always think our problems are technical in nature when many of them are business-related, self-induced by management.

I was managing an applications team, which included a group of four engineers who provided technical support to customers by answering their calls with requests for help. They faxed or emailed customers (email was new back then), sending them information as needed. Or they simply answered the customers' questions over the phone. This four-person team of apps engineers had about 30 years of experience each, and so 120 years of total expertise. This talented group formed our Technical Response Center, or TRC (name changed to protect the guilty).

These engineers, both men and women, were amazing to watch as they answered many customers' calls a day. We tracked and monitored their performance in closing customer inquiries including the time it took them to answer customers' questions. Typically, 100% of the customers' technical inquiries were answered the *same day*. Our response to these inquiries was second to none in the industry. If anyone questioned the performance of the TRC, we had all the data to show there was no problem here.

The apps engineers could answer any type of question relating to our company's ICs. Tough questions such as "how does this pin work?" or "can I get a die map for this part?" were no sweat. The TRC team had file cabinets full of tribal knowledge on top of what was already in their heads and knew how to get at information we had accumulated over decades of doing this function. Also, they were located inside the facility, so they could easily walk over to a product group to ask something if it was beyond what had been asked before. It was a pleasure to watch and the customers were delighted. I used to think that was the goal.

But while the in-house applications team was doing its job to near perfection, other changes were afoot in the company. During this time, a reorganization was occurring, and it was happening at a faster pace than I had ever seen before. It resulted in the hiring of some of the strangest management on earth.

One such hire was a new VP—let us call him Fred (his name also changed to protect the guilty). Fred came from a company that makes the commemorative coins, stamps and so forth that are advertised on late night TV—the types of products that you can buy for three easy payments of $19.99. Perfect background for a technology company VP, right? But of course, Fred had an MBA from a prestigious east coast university. And according to those who hired him, he could bend metal utensils with his mind powers and had a track record of stellar accomplishments turning dirt into gold as a financial whiz. Anything he touched made money so said the corporate executives that hired him.

In about his first month on the job he became fixated on the Technical Response Center, the TRC. First, Fred wanted to shut it down completely, but I was able to talk him out of that. So I figured we had dodged a bullet. However only a few weeks passed before he again became fixated on shutting it down, but with a twist. This time he wanted to move the function to a low-cost country in Europe.

Again, I did my best to talk him out of it, explaining that our customer satisfaction was great while the cost to the overall organization (a multibillion-dollar operation) was round-off error. Plus, ROI was fantastic and we had metrics galore. But no matter what, I could not get Fred to think about anything else. I considered getting him a puppy or some desk toys like those ball bearings that bounce back and forth (Newton's cradle).

Ultimately, common sense and logic did not prevail. Fred insisted that I lay everyone off and shut down the TRC because we were moving it to a faraway land where engineers get paid less. Let us call this far away land "Faraland" for short.

Now I tried pointing out that this was not our problem and did everything possible to oppose this move without getting myself canned in the process. Live to fight another day and all that. But I did point out that 120+ years

of knowledge and irreplaceable expertise was going to walk out the door never to return. Did he really, really want to do this?

Still Fred was convinced this was the perfect thing to do. I bet he told me multiple times how the *Faralanders* all have at least three PhDs at birth, are capable of superhuman feats, speak English better than anyone in North America as well as 12 other languages fluently, and so forth. Of course, Fred had an MBO (management by objective) or some other corporate mandate to do this so he could punch his ticket by showing how he reduced cost and get another, even better higher-level job someplace else in the future–that is how the game is played.

But getting back to the TRC, I ended up laying off the apps engineers, shutting down the TRC and then standing by on that first day as our new comrades in Faraland started answering the customer support line. That is when my phone started ringing continuously as our operator patched through angry customer after angry customer. They were screaming and yelling, "What did you people do? You used to be great at this" along with some words I could not repeat here.

One of our sales managers showed up at my office and asked what happened. I told him the story. Then, we both pulled Fred into a conference room explained the problem and we both recommended that we play customer over the speaker phone as a test.

When I dialed our support line, a person with a heavy accent answered. His accent was so thick it made him very hard to understand. But I gave it go to see how he might perform. I threw every simple, easy-to-answer technical question I could imagine at this person. The questions were easy because the answers were spelled out in the datasheet.

They were questions like, "how does this compensation pin work on this multiphase buck converter?" or "does it need feed-forward compensation?" and at one point, "do you know what a resistor is?" No feedback even on that last one. I tried to make things easier by suggesting possible answers to my questions as though it was a multiple-choice quiz. "Could it be this? or how about…?" The Faralanders would have none of that.

When I concluded I was getting nowhere with this person I asked whether there was anyone else I could speak with. The response was an emphatic "nyet, I mean no". So, when we had reached an impasse in the discussion, I thanked my new comrade and I hung up the phone. Now what, Fred?

At this point it was clear that we had broken the customer support that was fully functional just last week. So how do we fix it? Naturally, there was no mention that what we had done was probably a dumb thing. Fred said, "You need to call the people we laid off and see if we can hire them back as consultants to train the Faralanders!" Well of course. I love it when managers do dumb things and then say "you need to…" thus generating new work to solve a problem that their brilliance created.

I called the four staff members I had just laid off and told them that they could swear at me and slam the phone down if they wanted—it would be understandable. But it went better than I expected. When I told them what happened, we had a good laugh. As instructed, I made them offers on the consulting work. Two of them had gotten better jobs out of the industry and did not want any more electronics industry-post dot-com dysfunction. But surprisingly, two of them took me up on the offer.

So, we bought them tickets to Faraland, paid them good consulting salaries, put them up in hotels and fed them three Faralandian meals a day. They were over there for two six-week stints, after which we had them do phone backup for the Faralanders when they were stumped by questions. This occurred often as pesky questions about electronics and components frequently came up.

At this point in the story, it sounds like the plan to fix things might have been working. I suppose that in another place and time that might have happened. But here is something about Faraland that was not in the Faralandian sales literature (maybe unintended consequences did not get covered in MBA school). It turns out that in Faraland, if you have "training," you can usually get a better job down the street for more money. And when they quit, they just do not show up anymore—they immediately start working down the street for someone else. Therefore, the turnover rate at companies is about 350% a year or more. So, retraining the Faralandian application engineers would not be a one-and-done project.

After we put both of our former employees' children through college and paid off their homes by paying them consultants' salaries and extending their contracts to go back to train each new cast of Faralanders multiple times, we spent way more money on customer support than the TRC had ever cost the organization before. But in the new bizarro management world no one ever questioned the mess we created. Plus now I had to deal with my assignment of managing far-flung teams of FAEs as well as triaging this self-induced mess.

Despite this fiasco, Fred's plan produced the expected results. Having "proven" his skills in cutting cost and improving efficiency, he moved on to a management position at another company in an entirely different industry. I loosely followed his progress as he became just another VP that came and went through the revolving door of ineffective or destructive managers. The last I heard he wrecked a part of his new organization too and probably got paid more to do it again and again.

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