

Career Changes

DYP Article for CONTROL

[Career change: Why control engineers should step outside their comfort zone | Control Global](#)

R. Russell Rhinehart 2026-08-21

There is comfort in staying in a role in which you are competent, and where your accumulated experience is valued by others. There you have confidence in your ability, security in continued employment, and personal joy in knowing you can add value.

But maybe the job has gotten stale, and you find you are often idling, or lacking enthusiasm, or lacking the energy to grow.

Your persona at work carries over to your home life. You would like to be energized when you go home. And the company would like that also.

Making a change can be scary. If you ask for a transfer, how will your management react? Will it put you on their suspicion of unreliability list? Do you have the energy or ability to acquire new skills, and to understand new people and their business view and ways? Wanting to leave comfort may seem to be high risk.

Alternately, the company may want you to move to alternate functions in alternate locations, seeking human resource development. A new job function means becoming a novice again. Relocation will be disruptive to your family, who have best friends locally, and have figured out their current environment for personal success.

Every place I've lived markets itself (brainwashes their residents) as the best place to live, which means a move to anywhere else will seem like a step down, which compounds the discomfort of leaving friends.

Part of My Story

I was in industry for 13 years and became valued for my engineering skill and creativity, but I found I wanted to understand fundamentals, explore possibilities in process control, and enjoyed coaching entry level engineers. So, I left industry to get my PhD to be able to become a professor, where I thought the fit might be better. Here were three aspects of the gamble: 1) Success: Could I meet the PhD standards? At 40, could I get a research professor job? If I got a faculty job, would I be fit for it? If I did not get a faculty job, or did not complete the PhD, would any company want to hire me knowing I had rejected industry? 2) Economics: The plan meant four years of school with hardly any income. Then, a faculty job which paid about 60% of what I was making. How would all this affect my ability to provide for my family? 3) Social: Would I fit in socially? I was 13 years older than the other graduate students, with two kids. Would my school peers accept me? I had strong

opinions about the lack of relevance in academic publications. Could I accept the ivory tower values? Would I offend the instructors?

This is high risk! It was scary!

But it all worked out. Relearning all I'd forgotten was like riding a bike. It came back immediately. My work habits gave me a 13-year advantage over the graduate students, and they looked to me to help them solve the assignments and to understand engineering in industry. They accepted me. And nearly every day in class the light bulb came on, and I reacted with "That is how it is done! I wish I knew that years ago on my project." The instruction was very relevant.

The school transition was hard work, and the faculty job was more demanding than my industry job had been. But all was and continues to be wonderfully invigorating for me.

I understand Jack Canfield's quote: "Everything you want is on the other side of fear."

When I left industry, several colleagues indicated that they wish they were courageous enough to follow their dream. I enjoyed my time in industry, and probably would have been happy, and continually challenged, learning, and growing if I had stayed. But for me, entering the unknown had greater joys.

Another Part of My Story

I was very happy in the Process Development roll, my first assignment after school. "Figure out how to make things work or work better." It was always new and energizing. After three years the company wanted me to move to a manufacturing facility to help me understand where my development ideas were headed, so that I could generate more practicable ideas, and so that I would have a better understanding of the whole business as preparation for management. I wasn't kicking and screaming, but I did not want to leave the invent-new job for a keep-the-same-producing job. I loved where we lived, always had been in cities, and was reluctant to move to a small town which would lack resources. My supervisors convinced me the transition would be good for my career. And as an ambitious newbie, that carrot worked.

It was a wonderful experience. I did not know what I did not know.

Google's AI reveals "It's one of the truest statements out there. Psychologists call these "unknown unknowns"—the information gaps, cognitive biases, or invisible blind spots that we are completely unaware exist. Because you don't know the information is missing, you can't even begin to ask questions about it. It creates inherent limits to what anyone can conceptualize at any given time." It is known as the Dunning-Kruger effect. I learned more than I had expected.

People live in small towns and in cities, and wherever people live, they work to make it a great place to live and raise a family. In the small town, I had an acre of land, and discovered the joys of gardening. For several years, we raised and put-up enough vegetables so that we did not buy any during the winters. The children had woods to play in. We made lots of friends. You can always keep in touch with old friends as you gather new ones.

Donna and I completed our bucket list item, “visit all 50 states”. On every visit, big city or country, coastal or interior, mountains or plains, North or South, people make their local become a nice place to work, live, and raise families.

Change always seems to place me on a new and enjoyable adventure.

When changing jobs, rather than discarding prior knowledge and experience, it provides new perspectives and skill for the new community. The knowledge that made you confident in prior jobs remains useful. You do not lose your strength when you change jobs. And you acquire new knowledge and perspectives, which make you stronger.

Be Sure

I don’t want to start a flood of employees seeking new roles, or leaving their employer for an adventure. If you initiate change, be fairly certain that the change is important, and be dedicated to make it work. Don’t be reckless. "Fools rush in where angels fear to tread" - Alexander Pope.

If the company asks you to change, embrace the opportunity.

Develop Your Potential

Understand other industry functions and why they view other functions as they do. Learn new skills. Broaden your ability and perspective. Become more comprehensive in your ability to contribute.

Russ Rhinehart started his career in the process industry. After 13 years and rising to engineering supervision, he transferred to a 31-year academic career, serving as the ChE Head at Oklahoma State University for 13 years. Russ is a fellow of AIChE and ISA. Now “retired”, he enjoys coaching professionals through books, articles, short courses, and postings on his web site www.r3eda.com.

