Six Impossible Things Before Breakfast

7/13/2012

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This is a piece about employment; work, earning an income, bringing home the bacon (of course it is your choice on whether you will eat that bacon). Engineers and other technical professionals face a world very different from that of their parents and grandparents. 30 years ago or more it was not uncommon for someone to work for one company for an entire career, now that is a very rare thing. We live in a very different world where companies rise and fall, lay off workers, move facilities and functions and move them back again. We also live in a world where change is constant and far-reaching and driven by the development of new technologies and new ways to use those technologies.

Work (unless volunteer work) is normally a basic economic exchange. Someone has something or can do something that another person wants done, and so something of value is exchanged to get that thing or have that objective accomplished. Exchanges like this help us avoid fighting each other to get what we need or want. An important element of the type of work that most engineers, software writers, and other creative people do is that they make things that never existed before, do things that were never possible before and can satisfy desires that people never knew they had. In a very real sense these people create new wealth. This is in fact the reason why many engineers do the sort of thing they do—we can create the tools that literally change the world, and we enjoy doing it.

So if we can do things that are so valuable, why do many of us feel like we are struggling for our very existence? I think there are several reasons for this. We live in a culture that seems to promote debt. Having regular payments to retire this debt in a world where we may not know whether our income will be steady and sufficient to support it can lead to unease and worry. Also, the pace of technological change, which we helped create, leads to the early obsolescence of the knowledge that helped us create these changes. Thus we may find ourselves less able to create technologies than younger people who may be more familiar with how they work and how to use them.

Many of us deal with our employment concerns in relative isolation, perhaps only sharing our concerns with family or a few friends. If we are lucky these family or friends may have some understanding of the sort of work that we do and the motivations that drive us to do what we do. But most of us are not so lucky. Many engineers are somewhat withdrawn by nature, which is why they become involved in a world dominated by things and systems rather than people. We need some way

to reach across the lonely voids between us and find comradeship and support to help each other continue to be relevant and provide value in a changing world.

This is where an organization of people with some common interests and experience, such as the IEEE, can be of great value to the community of engineers and technical professionals. In region 6 as a whole electrical engineering, software and many of the other skills within the scope of the IEEE have led to companies and institutions that have created great wealth and have changed the world. We have in our numbers, great men and women who are an example of how to provide value through a long career that may include many changes in activities along the way. IEEE Region 6 can do several things to help its members in their quest to continue to work and provide value.

Here are some concrete things that Region 6 can do to help its members to prepare for a lifetime of productive activity (and these are things that I would like to pursue if elected as Director-Elect of Region 6):

- Between our many sections and society chapters we have a great variety of meetings, symposia, one-day classes that people outside those sections can benefit from—we need to find a low-cost, easy to use way to make as many of these activities as possible available on-line to IEEE members everywhere in Region 6.
- Lifetime employment is rare but many people have taken their fate into their own hands by becoming contractors or consultants. We need to expand the IEEE consultants network to sections where it isn't available yet and help to promote skills and knowledge on how to run a consultant business and how to create a network to find new work.
- In our larger IEEE sections there are often trade shows, IEEE meetings put on by IEEE societies and other places where we should be seeking to have an IEEE table or other presence. We should take advantage of more of these opportunities and get our volunteers to help man these tables. In this way these volunteers can meet new people, expand their networks and find out about new opportunities. Perhaps there are ways to help pull in folks from smaller sections to join in this fun.
- We need to develop new tools and methods to help us train experienced technical IEEE members the new skills and knowledge they need to work in emerging fields and businesses. I think we can work with educational institutions as well as the larger IEEE to bring such opportunities to every IEEE member in Region 6.
- Volunteers are the very basis of the value of the IEEE and being an IEEE volunteer can benefit the volunteering member. For instance these experiences can build leadership skills and they help the volunteer connect with other volunteers, learn about new technical fields and interesting opportunities. We need to encourage our fellow IEEE members to become volunteers—and thus also spread the work around so a handful of folks aren't doing all the work and burning out. Volunteering to help with the IEEE

should be one of the first things, rather than the last thing you do, when you are looking for work or a change in what you do.

We can help each other to remain relevant and able to contribute to a new technical world that is constantly developing around us. That should be one of the major roles of an organization like the IEEE. However we also need to encourage each other to have attitudes and an outlook on life that enables us to change as the world around us changes. That is what friends and trusted colleagues need to do for each other. We need to encourage each other to seek to do, like Alice in Wonderland, six impossible things before breakfast.