

EDITORIAL

Painting by Numbers

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OK . . . so now I have another topic that I would like to discuss related to topics discussed before. I have talked about the “Burger King Mentality,” “Chimpification,” “The Rainman Effect,” and other phrases that directly imply that there is no thought process whatsoever in the analysis or testing of some parts or components in some applications. The criteria are very straightforward, and there really are no hard decisions or thoughts to be applied to the process.

If we actually did have this type of a situation, then of course we need to streamline the process – it makes sense if it is that straightforward and deterministic. Of course, this is the Burger King mentality. Basically, the process becomes a push-button approach stated simply as: “Burger, fries, coke, \$3.28 total. \$5.00 tendered, \$1.72 change.” Bingo! No thinking required whatsoever.

Now these types of applications are following a set of predetermined rules. They are actually “painting by numbers” to create a product that is considered perfect – or a masterpiece. Now some of you may actually remember Paint by Numbers, which was very popular many years ago. You really didn’t have to be an artist at all. You were given a template that had areas labeled with numbers. All you needed to do was to apply colors according to the color code supplied. As long as you followed the rules and stayed within the lines, you painted your own masterpiece. Of course we use the word masterpiece very loosely here.

And the best part was – anyone could do it. Anyone could follow the steps, but one

thing was for sure – not just anyone could be a true artist. They didn’t understand how to mix colors, how to blend areas, and all the other things real artists know. But they were able to paint something they would never be able to achieve if they didn’t have the clear guidance and template provided by the paint-by-numbers scheme.

So what is the point of this discussion? Well, there are many engineering applications where a process is defined, and clear outcomes are identified. For these applications, I agree that paint by numbers is a reasonable approach. But the problem comes when we try to become real artists and try to paint outside the lines. In these cases, these so-called artists are not really prepared to perform tasks outside the original boundaries where they were comfortable in the past. And many times, these new artists do not know how to paint outside the lines, nor do they know how to mix colors to make new colors other than those given in the original kit. Nor did they know how to blend colors across those clear-cut boundaries previously so well defined.

Where we need to be concerned is when we try to extend existing rules and guidelines and move into areas where we have no experience or clear-cut guidelines defined – and then try to use those well-defined rules that worked so well in the simple world of paint by numbers. It may not be appropriate to use the existing paint-by-numbers approach when we are extending analysis into new areas beyond those previously reasonably well understood. We need to be careful when we try to paint outside the lines and mix colors that are not part of the

original specifications. If we are going to try to be real artists, there is a significant amount of education and basic understanding that needs to be obtained before we take that next step. And we need to remember that “thinking is required,” as discussed in other editorials I have written.

We also have to realize that there will be many instances where clear-cut guidelines may not be possible for certain applications. We may need to actually become more artistic in the way we qualify some of our designs; this means we have to think. We may need to be artists to actually start to evaluate designs using much more thought than the paint-by-numbers approach; that means even more thinking required. And it may not be possible to define clear-cut guidelines in the early stages of new extended applications – at least not until we totally understand the complete process again.


But the bottom line here is that it is impossible to paint a real masterpiece when you use the paint-by-numbers approach. And if you don’t believe that is true and you think that everything can be easily put into a paint by numbers approach, then I have a Monet that you may be interested in buying from me!

Painting kit: \$5.00

Brushes: \$8.00.

Easel: \$25.00 ...

An actual Monet: Priceless!

For everything else, there is paint by numbers. 

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