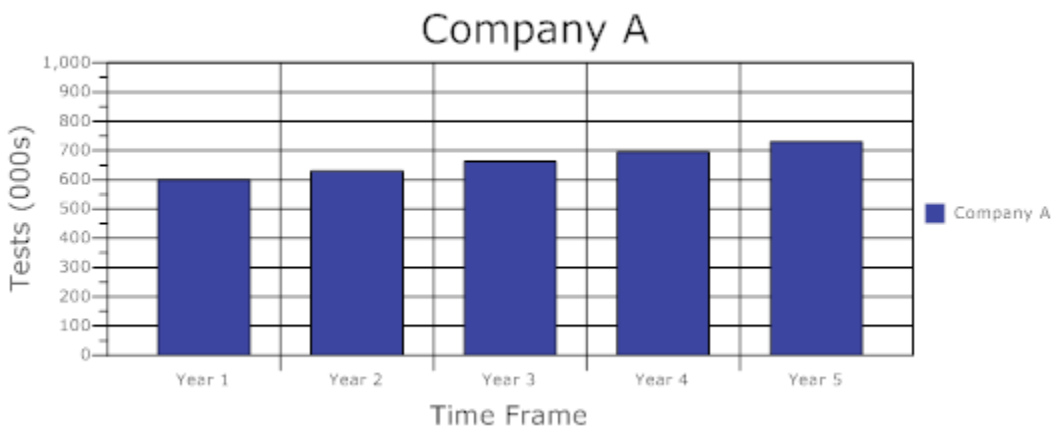


The Many Roles Visuals Play in Solving Business Problems

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Diagrams, charts and other visual aids can play important roles in solving business problems. One role is in identifying problems. Another is in drawing attention to them. A third is in diagnosis. And a good visual can even play a key role in presenting the solution to management. In this post, I'll touch on identifying and drawing attention to problems as an area where visuals have important roles to play. In subsequent posts, I'll look at the role visuals play in other stages of solving business problems.

Consider the bar chart in Figure 1 below. It shows the annual volume of student tests administered for one of Testing Company A's lines of business over a five-year period.



What does it tell you? Well, not much, actually. It shows steady growth in tests administered over the five-year period. No problem, right? Now look at the chart in Figure 2.

Figure 2 shows the same growth figures for Company A, however, stacked on top of Company A's figures are the figures for Company B, the chief competitor to Company A in this line of business.

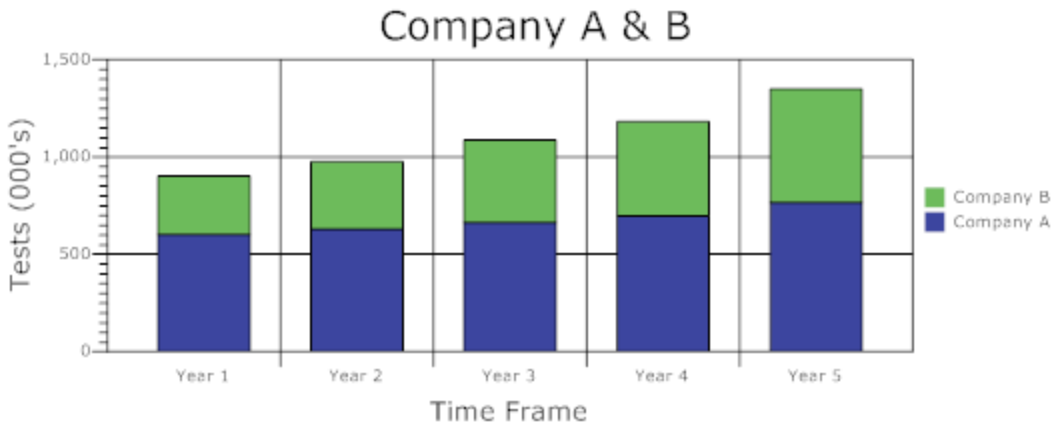
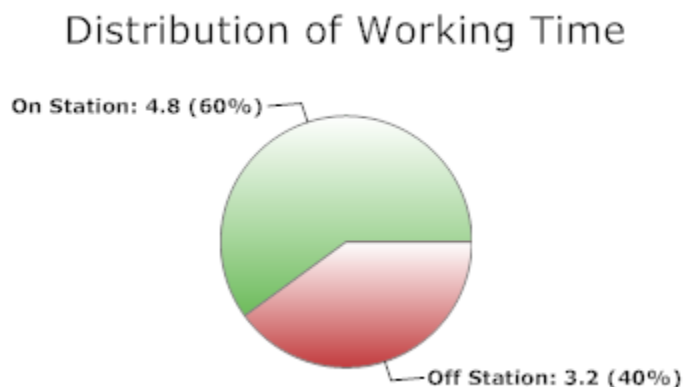


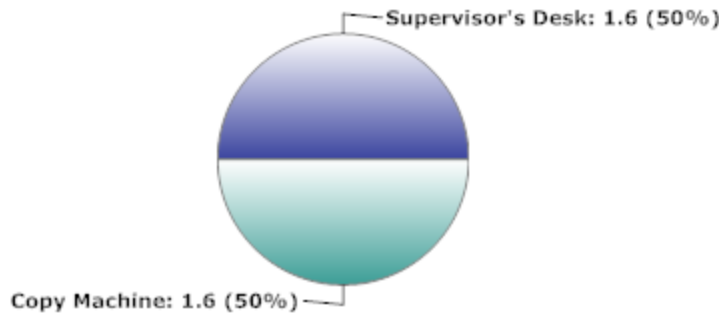
Figure 2 shows what executives at Company A considered alarming information. First, Company B was catching up – and rapidly. It had gone from about one-third of the market in year 1 to more than 40 percent in year 5. Company A had actually lost market share. Equally important, the total number of tests administered indicated the market itself was growing – and growing faster than Company A had realized. Company A was losing share in an expanding market! Needless to say, executive attention was quickly focused on this problem.

Here’s another quick example. Take a look at Figure 3 below. What does it tell you about the amount of time the workers in question (claims examiners) are spending at their work stations and how much they’re spending away from it? That should be pretty obvious: about 60 percent of their time is spent on station and about 40% is spent away from it. A logical question at this point is where is that other 40 percent going?



As Figure 4 illustrates, the examiners were spending about 40 percent of their time standing in line. Twenty percent was spent standing in line at the one, high-speed copy machine in their work area and the other 20 percent was spent standing in line at their supervisors’ desks, waiting to obtain their supervisor’s approval for a proposed resolution to a claim.

Distribution of Standing in Line Time

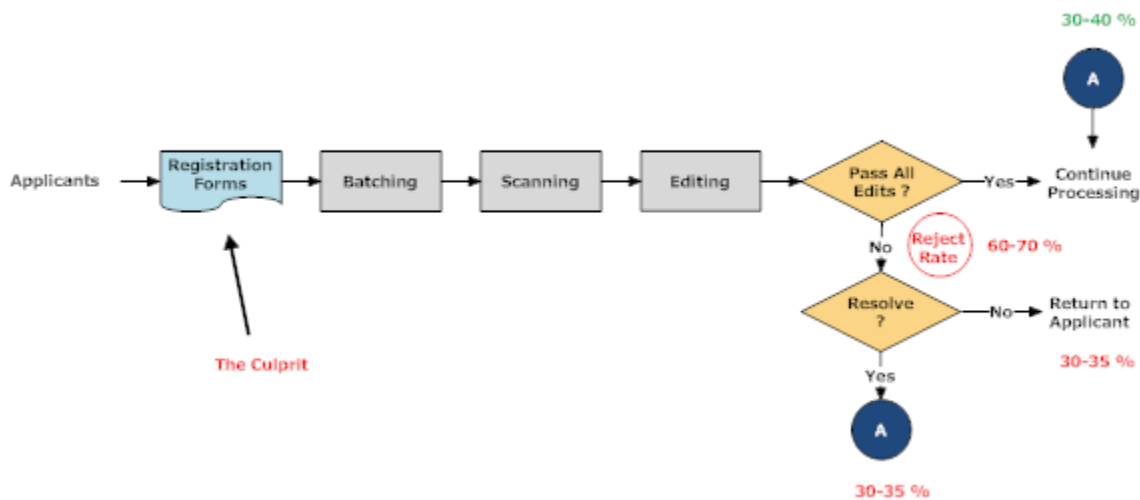


These simple little pie charts helped focus managerial attention on a problem they didn't even know existed.

Visuals can also play a role in getting a fix on a problem, on pinning down its nature and location.

Figure 5 is a simple flowchart representation of a registration processing operation at a major testing company. The division director was concerned about the reject rate in this operation and an effort was launched to lower it.

Data regarding the reject rate were showed that the reject rate averaged 60-70 per cent per run. Of the 60-70 percent of the registration forms that were rejected, about half (30-35 percent) could be resolved by resolution clerks and the other half (another 30-35 percent) were returned to the applicants who had submitted the flawed registrations. It was clear that there was nothing wrong with the registration processing operation itself and that the problem tied to registration forms that were incomplete and that contained invalid entries. In other words, the input to the processing operation was flawed. The business problem was a lot of expensive rework, a lot of upset registrants and an increasingly concerned client.



In the first two examples, visuals played important roles in identifying and drawing attention to a problem no one knew existed. In the third example, the visual served to quantify a sensed problem and to identify faulty input as the chief cause.

In a future post, we'll look at how visuals can also play a role in actually solving business problems.

***About the Author:** My name is Fred Nickols. I am a writer, an independent consultant and a former executive. Visual aids of one kind or another have played a central role in my work for many years. My goals in writing for SmartDraw's Working Smarter blog are to: (1) provide you with some first-rate content you can't get anywhere else, (2) illustrate how important good visuals can be in communicating such content and (3) illustrate also the critical role visuals can play in solving the kinds of problems we encounter in the workplace. I encourage you to comment on my posts and to contact me directly if you want to pursue a more in-depth discussion. I can be reached via email at fred@nickols.us.*

