

Trochil's Seven Technology Principles

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When working with technology, whether it's selecting new software, implementing or upgrading technology, or just trying to get more out of the technology you already have, it's important to keep in mind some key principles about how you should use technology.

When I work with my clients, I always try to keep the following seven principles in mind for every decision being made.

1. Technology should make us more effective not just more efficient

One thing that technology can be very useful for is making us more efficient. In this instance, efficiency means using technology will allow us to complete a task in a shorter amount of time than without technology. For example, using the telephone to call my neighbor is more efficient than walking over and talking to him.



But efficiency and effectiveness are not the same thing. And we have to be careful about ensuring the technology we're applying is actually making us more effective, not just more efficient. As one of my esteemed colleagues is fond of saying, if we have a process that produces crap, and we apply technology to it to make it more efficient, all we are doing is creating crap more quickly.

So before you spend a lot of time implementing new technology to make you more efficient, make sure the technology is also going to make you more effective. And often effectiveness is not about the technology, but rather about our business processes. Does what we're

doing make sense? Does it help the customer? Does it advance our organization's mission? And if the answer is yes, then will the application of technology make us more effective doing those things?

These are the questions we have to ask when it comes to new technology.

2. **Just because you can automate doesn't mean you should**



Because I'm a tremendous geek and love software, I'm always open to exploring new software programs that may somehow make my life easier. Over the course of nearly 25 years, I've probably tested more than four dozen different "task managers." You know what I'm talking about: these simple programs that allow you to track your "to-do" list and check things off as you do them.

In theory, these programs sound great to me. I'm at my keyboard all the time, so why not have a little program that allows me to quickly jot down to-dos as I think of them. And then I have my to-do list, which I can work off of, and check-off as I complete them. Makes sense, right?

Yet for some reason, I've never been able to get these programs to really work for me. No matter how I try, I always wind up back at paper. And in the end, there's nothing wrong with that. If paper works better, so be it.

As much as I LOVE technology, sometimes technology solutions are NOT better than the manual processes we're using. And this is true for all of our processes, especially as they relate to data management. Sure, automate things that will really scale up and save lots of staff time. But if you've got a process that is automated for 2,000 transactions, and 20 of those transactions won't work in the automated process, then manage those 20 manually. Don't pull your hair out trying to automate it all.

3. "Less, but better."

I first came across this line in the great Steve Jobs biography by Walter Isaacson. "Less, but better" was the design mantra of Dieter Rams from

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Braun. Braun, of course, designs all types of household appliances, from razors to coffee makers. And his design philosophy was that all things should be as simple as possible, but of course, better than they were before.

I think this is a great philosophy when thinking about any technology. Technology that gets in the way, of course, is not helpful at all. And very often we'll encounter technology that is clearly "over-engineered." (My wife actually owns an electric wine bottle opener. Really? Is opening a bottle of wine so difficult that we need an electric opener?!?). So when you think about the technology you use, or equally important, the processes you use to manage the technology, keep in mind "less, but better."

4. Outsource when you can

If you're like me, when you have some type of internal challenge with managing information within your organization, you may first look to technology as a potential solution. For example, I have dozens of clients in the course of a year, so naturally, I have dozens of invoices I need to manage. I've got financial software that I use to do that. It works for me and it keeps me on top of who I've billed and who still owes me money.

But sometimes, it makes more sense to use outsourcing to address your issue, rather than using technology. Many of my smaller clients, for example, will use third-party accounting companies to manage invoicing, payroll, and other general ledger activities. There are plenty

of software packages that would allow them to do this in-house, but they've determined it's easier and more economical to outsource this, rather than have to hire staff and keep them trained on the use of the software.

So when you're addressing an internal operations issue in your organization, remember that, along with technology, another solution may be to outsource the problem entirely.

5. **Just because it's free doesn't mean it comes with no cost**

The internet is awash in free software. I love it, of course. So much software, so little time!

But just because software is free does not mean that it has no costs associated with it. Even the simplest of software will have some level of learning curve associated with. That means you've got to invest time in learning how to use the software.

And the more sophisticated the software, the more time it will require from you. Or from someone you'll have to pay. For example, two of the most common content management software (CMS) packages in use today are Drupal and Joomla. Both programs are entirely free. You can download them right now and start using them. That is, if you know HOW to use them. And therein lies the cost.

In order to use Drupal or Joomla, you'll have to invest time learning how to use the software, or you'll have to pay someone who already knows how to use the software to install it for you and teach you how to use it. So even though it's free, it certainly isn't without cost.

I don't mean to pick on Drupal or Joomla, or any other open source software, for that matter. Free is good. But it isn't without cost. And you need to keep that in mind no matter what technology you choose.

6. Everything comes with a trade-off

This is somewhat related to principle #5, in that no matter what decision you make about technology (or any other decision you make in life!), you're going to have to make trade-offs. In principle #5, I pointed out that "free" doesn't mean "without cost." In this case, the trade-off for free software is the cost of learning the software itself or paying someone to implement it on your behalf.

And so it is with all your technology decisions. Whatever you choose, you'll be making trade-offs. You may choose software that has ALL the bells and whistles. The trade-off you'll make is a higher price. You may choose technology that allows all of your staff to edit and post to your website (i.e., a CMS). The trade-off you'll make is that control is decentralized and therefore, there is more risk of something being published in error. And so on.

Understanding that every decision comes with a trade-off gives you a different (and more appropriate) perspective on the choices you're making.

7. Have a disaster recovery plan

This principle should be self-evident, but is still not in place in all organizations. You **MUST** have some type of disaster recovery plan in place. And not just for your technology, but for your entire organization's operations. (By definition this includes all of your technology.)



Back in late 2001, a colleague of mine managed a small non-profit in DC. The building in which his organization was located received one of the anthrax letters sent during that time. As a result, their office building was closed for the better part of the week. Unfortunately for them, they had

no real disaster recovery plan in place. They were unable to access any of their electronic files (all housed on an internal server). They were unable to redirect their phone calls so that all they could do is change their outgoing messages and then check for messages every hour.

With today's technology (e.g., cloud computing, software-based phone systems, etc.) there is no excuse for being completely cut off from your files or your phones. But beyond the technology, you need to have processes in place so that staff understands what they are to do in times of a disaster. How do they report in? How do they access their business files? Who is responsible for which systems? And so on.

We live in a volatile age, where a small event could escalate to a large disaster in very short order. Is your organization prepared to operate under those conditions?

Conclusion

None of these principles are rocket science. I like to think they are just common sense. But too often we make technology decisions in haste or in a vacuum. Keeping these seven principles in mind will help you make better and more effective technology decisions.