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Tech Connection

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# The Not-So-Messy Middle

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I take the word “connection” in the name of this column seriously. It encapsulates an important aspect of technology—particularly digital technology — which is that it helps information get from point A to point B.

For example:

Credit card terminals transmit information from a customer’s bank to your business bank.

Cloud-based bookkeeping systems allow you to keep track of accounts receivable and send invoices to customers.

Email marketing software takes purchase data from a point of sale system and uses it to define customers to receive specific marketing messages.

## Tornado Tubes & Tech Selection

The previous column (“Is Your POS a POS?” in July 2024) I talked a lot about connectivity as it relates to choosing a POS (point of sale) system. I promised to dive deeper into various options this month, but first I need to give you more information about connectivity.

You could say that each of these Tech Connection columns are, well, connected.

We have to chat connectivity in a more in-depth way because that is a key to choosing a POS (or any other type of tech) that you’ll be happy with. Connectivity is what gives you time back and helps you increase repeat visits and average ticket value.

To picture the concept of connectivity and get curious about different ways to connect this to that, I use my favorite metaphor: the tornado tube. When you were young (or your kids were young) did you have that little tube that let you screw two 2-liter bottles together? You’d fill one bottle about two-thirds full and then use the tornado tube to connect an empty bottle on top. Flip the contraption over, give it a little twirl and watch a tornado of water form (and drain into the bottom bottle).

It is easiest when you can choose two pieces of tech that have “native integrations,” or connections that have already been coded into each piece of software so there’s no coding on your side. An example of this is Shopify Point of Sale and Klaviyo email marketing or Square POS and MailChimp for email marketing. There are other ways to connect, though, and sometimes it’s worth looking into those so that you can benefit from the outstanding features of two separate systems.

Here are some tech “tornado tubes” worth exploring.

## Easiest: Middleware

Middleware can be the secret weapon to creating your preferred,  integrated system where various pieces and parts seamlessly “talk” to each other and yet most people have never heard of it! Most software won’t do everything, and the missing pieces are enough to cause big headaches. With tested, proven middleware, those headaches can go away.

Like its name implies, middleware is software that functions in between two different systems to connect them. There is a cost associated with middleware, which can be off-putting to some people. There’s also the issue of managing yet another piece of software. However, if a $30/month middleware program will save you $10,000 or more per month in labor costs (say GOODBYE to entering data in triplicate) or will allow you to spend more time on sales or use more sales tools so you sell an additional $10K or $100K, it’s worth it.

My introduction to middleware was by using Zapier. (zapier.com) There is a free version available so I encourage you to take a look around and see how it could help you connect different parts of your business systems. Zapier has thousands of pre-built workflows to connect software. A few examples are: SalesForce to Quickbooks; Quickbooks to Shopify; Mailchimp and Eventbrite; Trello (project management) and Outlook.

To get started, sign up for a free Zapier account and then start exploring. You will need to give permission for Zapier to connect with the different programs you’re using. Zapier will walk you through it. Have your passwords handy! Occasionally, a program will reset and you’ll have to reconnect it to Zapier. In that case, Zapier will send you an email telling you to reset the connection.

I KNOW this sounds like a lot. Once you start playing around with it to explore connecting programs you already use, it will clear up. With such difficulty hiring qualified labor, anything you can do to streamline your administrative and marketing tasks will help you grow your business.

## Specialized Enterprise Middleware

Say the word, “Enterprise,” and everyone immediately runs away. Enterprise can mean “expensive,” but “expensive” can be relative to the opportunities that money opens up.

I’d call enterprise middleware a solution that is specialized around a group of tasks and is built to connect complicated, multi-faceted programs. Modern Retail is an example of middleware configured to connect retail-related software such as Epicor Eagle with Shopify. It’s like Zapier but specifically for retail. With these types of systems there are setup fees for configuration because the programs they connect are complicated. There are then usually ongoing subscription fees to maintain the connection (which is what Zapier does). The fees are higher because the integrations are more specialized. But, again, a $300 monthly connection could open up $100K in sales opportunity for you.

## Hardest: Customized API Connections

If you’re going to use a custom programmed API (Application Programming Interface) connection, you have to have a reliable relationship with a programmer who will also provide you with excellent written documentation about how the API connections are set up. That’s because if that programmer departs the relationship you don’t want to be stuck having to do forensic investigation on your systems. You want to be able to hand over a set of documents that tells the next person you hire how to run your machine.

All of the middleware options run on API connections, but those connections are maintained by the company providing the service, not by you. If you build your own API connections, you’re responsible for maintaining them.

The whole world pretty much runs on API connections these days. It's not that they are out of the ordinary, but they are not something that most people running retail businesses want to deal with themselves. The other downside to custom API connections is that it's not just hooking two pieces of software together through API that needs to happen. There's almost always a degree of customization required on one or both sides of the connection for the two to communicate. And anytime you customize there's the potential for breakage. For example, if you customize a WordPress website so that you can have your ERP automatically upload inventory to the site, if WordPress updates, that customization can break. If the ERP updates the connection can break. It doesn't mean you can't or shouldn't use this method, but this type of customization is often more expensive and difficult to maintain in the long run than going with a reliable middleware option. **GP**

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