

You Call it Legacy. I Call it Production.

The IT world is moving fast according to the pundits. You may read the latest round of articles that tell you about microservices and cloud-first, or cloud-only organizations who are using development strategies to embrace DevOps and the inevitable shift towards next-generation platforms.

Containers, clouds, microservices, DevOps, Serverless...and Legacy!

Tired of buzzword bingo? You're not alone. One of the most common themes that we see among many of those who are pushing us toward the next platforms is that we keep hearing about "legacy IT". The word legacy is thrown around as if we are supposed to feel bad that it is still here. The reality is that what most leading edge pundits call legacy, is what 90+% of organizations call production.

As a firm believer in leaning forward, I may even be accused of being a little too far over my skis as some like to say. What I make a point of doing is keeping a foot firmly planted in today's infrastructure at the same time that I have the other foot on the path to something new and unknown. It's an important tactic that we all need to embrace IMHO.

The Path to Tomorrow Starts with Understanding Yesterday

I'm not trying to be all philosophical with saying that you can't understand tomorrow without understanding yesterday, but that is a very real issue that people can overlook. This comes in other ways that I like to phrase it:

- you can't automate what you don't understand
- process improvement implies you understand the process
- don't buy technology that is a "solution looking for a problem"

Don't even get me started on bimodal. Ok, I'll get started myself.

Welcome to Septimodal IT

Much of the punditry in our industry has landed on this concept of bimodal IT. What's frightening to me is that it's being treated as if it is new and that because it was given a name, that a consulting company is needed to help you understand it and get through it. We've been bimodal since the 1970s.

This is my picture of most IT shops in enterprise organizations:

1. Paper - don't knock it. More of your business is run here than you realize
2. Mainframe - centralized computing model with lots and lots of data
3. AS/400 and mid-tier computing - bridging the mainframe and the distributed platforms
4. Client/Server applications - common distributed systems architecture
5. Desktop-based - yes, MS Excel is keeping your finance department systems alive
6. Cloud-Native architectures - on-premises and cloud-hosted, but cloud-native architecture and design
7. SaaS-based - web and mobile access to SaaS platforms

When we roll one off of the bottom, it will inevitably be replaced by one at the top. Technically, there

are six forms of real IT-based content in the list, but I would rather not call it Sexamodal because that just sounds creepy.

Embrace Legacy and Nurture it's Evolution

The more that we try to move forward, the more we tend to create abstractions to reduce the friction of interacting with the previous generations of IT systems. This is a great enabler for us to be able to keep the data and systems where they excel. Why should you move all of your data out of a distributed system into a web-based, cloud-native architecture when the cost to do so would far exceed the value gotten from the refactoring.

Make sure that you understand the real business requirements of the current systems before we race to replace them. Any decision around technology that is not made in the context of a business requirement will lead to costs and frustration. Plus, before we go around tagging everything as legacy as if it is a bad thing, remember that it is keeping your business alive.

Don't Throw out that Spinning Disk Purchase Order Yet

Wait, what? Isn't Flash the only future? Isn't cloud-native the only way to develop applications? Isn't [future of IT product] the only real solution?

It's time for a quick little health check on the IT ecosystem. Before we start, I have to admit that I do lean forward with regards to technology. The reason is that I've witnessed countless technologists and organizations alike get caught out as technology passed them by and they were left scrambling to catch up.

As you'll see when we wrap this quick little article, there is a reason I brought this up.

[insert IT product] of the future!

Whenever we look for the next big thing, and trust me, we are all doing it in one way or another, we tend to look a little too far down the road. Whether it's the pundits (me included) or the analysts, there is a need to have the 5 year crystal ball so that we make the appropriate decision now.

A very important practice I was reminded of when discussing upcoming features that are on a road map, is that when you talk about what's coming before it is available, it tends to slow down the buying cycle. People may be willing to hang on a little longer for that feature that you are touting.

We know this as the Microsoft/Oracle/VMware/[many vendors] vaporware approach that has disappointed us so many times in the past.

The storage industry, we are told, is at an inflection point. Let's roll back the calendar 10 years. The storage industry, 10 years ago, was at an inflection point. Here's a hint...in 5-10 years it will be at an other inflection point. The same could be said for the network industry, the software industry, the hypervisor market.

We are always at an inflection point. What is often forgotten about is that the long tail of legacy also preserves its place in the industry for much longer than it is often described.

I titled this article in relation to many folks who are looking to abandon spinning disks for flash arrays and all-flash architectures across the board. We have been told about how that is the inevitable future. Don't get me wrong, there is a massive shift happening in data centers around the world. Flash storage is a phenomenal tool in the IT toolbox to bring us to a new generation of storage. It does not, however, stop the massive traditional magnetic storage market which has a long life left in it.

Will our future predictions of today look as crazy as the future views in Popular Science used to? Back when they were published, it seemed like it was where things were going. Watch this and tell me if we got there:

Beta lost the war in the late 1980s, so why did it just die in 2016?

If you've been around long enough, you may remember the [Beta versus VHS standards war](#). More recently we saw a similar battle over the DVD standards where Blu-Ray won out over HD-DVD. The reason that this is important is that it was only just announced that [Betamax tape production will end next year in 2016 according to sources](#).

The long tail of legacy has been proven out in many aspects of IT. While we like to blame the luddite mentality for hanging on to a lot of legacy technology and methodologies, the reality is that each of those legacy technologies serve a distinct purpose.

The world of technology is moving into the cloud, onto flash storage, up the stack to containers and PaaS, and the open source alternatives to the traditional incumbent vendors are taking hold and growing. It is very certainly a shift, but we also have a long time before we evacuate the data centers of hardware just yet.