Everything I Needed to Know About IT, I Learned From Stan Lee

Tech lessons that leapt off the page in a single bound

By Leon Adato, Liz Beavers, Thomas LaRock, Alex Taylor, and Chrystal Taylor
# Table of Contents

Introduction.................................................................................................................. 1

Leon Adato.................................................................................................................. 3

Liz Beavers.................................................................................................................. 3

Thomas LaRock.......................................................................................................... 4

Alex Taylor................................................................................................................. 4

Chrystal Taylor........................................................................................................... 4

Foreword...................................................................................................................... 5

DANGER! Spoilers Ahead.............................................................................................. 6

...I Learned From “Doctor Strange”............................................................................. 7

...I Learned From “Guardians of the Galaxy”.............................................................. 17

...I Learned From “Logan”......................................................................................... 20

...I Learned From “Deadpool”.................................................................................... 30

...I Learned From “Spider-Man: Into the Spider-Verse”........................................... 32

...I Learned From “WandaVision”.............................................................................. 41

...I Learned From “Falcon and the Winter Soldier”.................................................... 44

In Memoriam.............................................................................................................. 51

Dedications................................................................................................................... 57

Legal Stuff................................................................................................................... 58
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EVERYTHING I NEEDED TO KNOW ABOUT IT, I LEARNED FROM STAN LEE

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Chrystal spent the last 10 years helping companies of all sizes in just about every industry with their monitoring platforms. From install and configuration to specific customization and even some automation, she assisted other IT pros with the key task of getting the job done. She learned so much in those 10 years, and her non-technical, or “soft,” skills gained in retail—and a brief stint in collections, don’t ask—gave her a leg up along the way.
Foreword

By Leon Adato

It’s nigh unto cliche to point out the almost automatic association between so-called “geeks” or “nerds” and comic books. So much so it’s become a shorthand in movies and TV. Need to indicate a character is nerdy? Have an issue of “The Uncanny X-Men” hanging out of their pocket. Or have them wearing a t-shirt sporting a superhero’s emblem or catch phrase.

Like all cliches, this relationship is built on at least a kernel of truth. Comic books have been an indelible part of geek/nerd culture since the big blue alien boy scout first wore his red underpants on the outside of his tights.

And—whether it’s because (broadly speaking) those same geeks and nerds have an affinity for science and math; or they’re drawn to the more futuristic elements of our world; or they find comfort in the consistency (if not predictability) of automata—those same folks often make their careers in tech and IT.

Which leads me to an observation: a disproportionate number of folks making their career in tech are also folks who consume, enjoy, and find joy in comic books.

But why? Why would IT folks continue to collect, read, and enjoy comic book stories so often labeled “books for kids” well into adulthood? I’ve heard a lot of sober, thoughtful, “grown-up” answers to this: the artwork is iconic and a reflection of (if not commentary on) societal norms; the storylines are far more mature than critics give credit for. The episodic, long-form storytelling format allows for interesting character development and satisfying plot resolution not possible in other entertainment forms.

To be honest, I don’t buy it. Those might be reasons for adults in general to appreciate comic books, but I think there’s something more primal at work for those of us working in tech, and it has everything to do with the reasons we find our IT careers so fulfilling in the first place.

Comics offer a very particular way of interpreting the world. Of understanding events around us. Of recognizing the moral aspect of choices. They also show, explicitly and implicitly, how those things OUGHT to be. Even in the darkest, most apocalyptic narrative, there’s the hint of what is wrong, and why.

Critics of the comic book form are quick to call this immature, simplistic, and juvenile. They’re also quick to deride the utopian view of the world with its emphasis on the general nobility humanity, people’s willingness to make good (and sometimes altruistic) choices, and the assumption folks who discover they have super powers will immediately (and always) choose to help others even at their own expense. This viewpoint has led writers to create stories with a “darker” narrative, “grittier” characters, and heightened “realism.”
But...

Any math student can tell you, simplifying a problem is the first step to solving it. Experienced IT professionals know complex problems can’t be solved until the component parts are separated out. Folks working in tech are first asked to imagine a world as it ought to be, and then chart a course to getting there. Sure, this better world is usually both limited and specific (“can you make it easier for customers to send us this information? Can you make it so easy (and fun) they can’t wait to do it?”), but we’re still asked, over and over, to not only envision a better world, but to provide specifics of how it would be better and how to get there.

Comic book stories prepare us for this. They provide a map for what the process might look like. They show us the value—both to ourselves and to our community—of making this kind of leap. This is a long way from two people not killing each other because they realize, at the last moment, their mothers have the same name.

Beyond that, comic book stories provide metaphors and models for life lessons in a way that’s easy to accept and internalize. The Hulk shows us the importance of acknowledging our emotional state, the risk of suppression, and the power of properly channeling our emotional energy. The X-Men gives examples in every issue of how to function as a team even if we disagree with (and may not even like) each other. Characters like Mr. Fantastic, Doctor Strange, Tony Stark, and Hank Pym emphasize the way problems are solved more often by doing the hard work of research and testing than punching them until they submit.

But perhaps most of all, the lessons and experiences in comic books mirror those we—who make our livelihoods in IT—find in our daily work. Which brings me to the point of this book. In the following chapters my co-authors and I will describe those parallels. In the process, we’ll offer up another example of how we, as IT practitioners, are better if we bring our whole selves to the office every day. We’re better technologists when we allow our past experiences—whether from school, past (non-tech) jobs, hobbies, or graphic novels—to inform our choices.

On behalf of Alex, Chrystal, Thomas, Liz, and myself, I want to thank you for taking time out of your day to read (and maybe share) this book. As the big blue flying boy scout might say:

“Up, up, and away!”

**DANGER! SPOILERS AHEAD**

If it wasn’t already clear, there are many, MANY spoilers to follow. If you haven’t seen the movie or TV series featured in a particular chapter—and you don’t want to know what’s coming—it’s best to bookmark those pages, skip ahead to the next section, and come back to enjoy it later.
“When the student is ready, the teacher appears,” is a well-known phrase, but I was struck recently by the way the teacher appears in unexpected forms sometimes. It’s not always the kindly and unassuming janitor, Mr. Miyagi, or the crazy old hermit, Ben Kenobi. Sometimes the teacher isn’t a person or a character, but an entire movie filled with lessons for students who are ready.

I found myself in this situation as I sat watching Dr. Strange.

There, hidden among the special effects, panoramic vistas, and Benedict Cumberbatch’s cheekbones were some very real and meaningful IT career lessons, applicable to both acolytes and masters as they walk the halls of your own technological Kamar Taj. In fact, I discovered a series of lessons.

**Know the Essential Tools of the Trade**

The movie introduces us to the concept of a sling ring, a magical device allowing a sorcerer to open a portal to another location. In the narrative arc of the movie, this appears to be one of the first and most basic skills sorcerers are taught. It was also the key to many of the plot twists and a few sight gags in the movie. In my mind, I equated the concept of the sling ring with the way all IT pros need to understand and master basic skills, such as IP subnetting, command line syntax, coding skills, and security.

Can you be a solid IT pro without these skills? Sure, but you’ll never be a master, and odds are good you’ll find yourself hanging around the lower end of the career ladder far longer than you’d like.
Think Creatively About How to Use the Technology You Already Have

In the movie, immediately after figuring out how to use a sling ring, we see the hero use it in non-standard ways. Instead of opening a portal for his whole body, he opens holes just big enough for his hands, so he can borrow books from the library and avoid being detected by Wong the librarian. We see this again in the use of the Eye of Agamotto during Doctor Strange's face-off against Dormammu.

The great thing about essential IT skills is they can be used in so many ways. Understanding network routing will allow you to build stronger and more secure environments in the cloud. A grasp of regular expressions will help you in coding, in using various tools, and more. Understanding the command line, rather than being trapped in the GUI all the time, allows you to automate tasks, perform actions more quickly, and extend functionality.

Don’t Let Your Desire for Structure Consume You

In the movie, Mordo began as an ally, and even friend, of Stephen Strange, but displayed certain issues throughout the movie. In claiming he had conquered his demons, the Ancient One replied,

We never lose our demons. We only learn to live above them.

Mordo's desire to both protect the natural order and remain steadfastly within its boundaries proved his undoing, with him leaving the sorcerers of Kamar Taj when he discovered both the Ancient One and Doctor Strange bent the rules to save the world.

I find this relevant when I see seasoned IT pros forcing themselves to operate within constraints that don’t exist, except in their own minds. When I hear IT pros proclaim they would never run (name your operating system, software package, or hardware platform) in their shop, it’s usually not for any sound business reason. And when those standards are challenged, I’ve watched more than a few seasoned veterans break rather than bend. It’s not pretty, and it’s also not necessary.

There Are Never Too Many Sorcerers in the World

Mordo’s reaction is extreme. He begins hunting down other practitioners of the magical arts and taking their power, proclaiming, “There are too many sorcerers in the world!”

There are times in IT when it feels like EVERYONE is trying to become a (again, fill in your technology or specialty here) expert. When a whole crop of new folks come into a discipline, it can be tiresome watching the same mistakes being made or having to explain the same concepts over and over.
But the truth is there are never enough sorcerers, or in our case, specialists, in the world. There’s plenty of work to go around. It takes time to realize not everyone is cut out for some of these specialties, and those who make this discovery often find themselves overwhelmed and leave—hopefully to find a more suitable area of IT.

While I don’t expect anyone reading this to magically extract the IT power from their peers, I’ve watched coworkers shoot down or even sabotage the work of others just to maintain their own privileged status. I’m happy to say this tactic rarely works, and never ends well.

**Persistence Often Pays Off**

At one point in the movie, the Ancient One sends Strange on a trip through alternate dimensions, then asks, “Have you seen that at a gift shop?” When Strange begs her to teach him, her response is a firm “no.” Hours later, Strange is wailing at the door, begging to be let in.

At some point in your career, you may have an epiphany and realize your career goals point you toward a certain technology or discipline. And, just your luck, there’s a team specializing in it! So, you go to the manager or team lead and ask if you can join up.

Your first request to join the team may fall on deaf ears. And your second. You may need to hang, like a sad puppy dog, around them in the lunchroom or around the water cooler for a while. Unlike Doctor Strange, it may take weeks or even months of persistence, rather than a few hours. But it doesn’t mean it’s not worth it.

**When Fate Robs You of Your Skills, You Can Always Seek Others**

The catalyst for the whole story was an accident where Strange’s hands were damaged beyond repair, or at least beyond his ability to ever hold a scalpel again.

The corollary for IT pros happens when we lose a technology. Maybe the software vendor is bought out, and the new owner stops developing the old tools. Maybe your company moves in a different direction. Or maybe the tool you know best simply becomes obsolete. Whatever the reason, we IT professionals have to be ready to, in the words of my colleague Thomas LaRock, learn to pivot. The interesting thing is, very much like Stephen Strange, most of the time when we are asked (or forced) to pivot, we find we are able to achieve results and move our career forward in ways we couldn’t have imagined previously.

**Leverage the Tools You Have to Learn New Tools**

One of the smaller jokes in the movie is when Wong the librarian asks, “How’s your Sanskrit?” Strange glibly responds, “I’m fluent in Google Translate.” (Side note: Google translates Tamil, Telugu, Bengali, Gujarati, Kannada, and Sindhi among other Indic languages. But Sanskrit is not—yet—on the list).
The lesson for us in IT is how often we can leverage one tool (or the knowledge you gained in one tool), to learn another tool. Maybe the menuing system is similar. Maybe there are complementary feature sets. Or maybe knowing one solution gives you insight into the super-class of tools both tools belong to.

**There’s No Substitute for Hard Work**

It’s important to note how Strange does, in fact, learn to read Sanskrit. He puts in the work, so he isn’t reliant on the tool forever. In fact, Strange is rarely shown already knowing things. Most of the time, he’s learning, adapting, and most frequently struggling to just barely keep up. But at the same time, the movie shows him putting in enormous amounts of work. He rips through books at a fearsome rate. He learns to project his astral form to stretch out his sleeping hours and continue to read, absorb, and increase his base of knowledge. Obviously, he also has natural gifts, and tools, but he doesn’t rest on either of those.

In IT, there really is no better way to succeed than to put in the work. Read the manual. Test the assumption. Write some sample code. Build a test network. Join a forum and ask some questions.

**Experience, Creativity, and Powerful Tools Help Save the Day**

At the climax of the movie, Strange defeats the Dread Dormammu, lord of the dark dimension, in a most curious way: he creates a temporal loop only he can break, locking Dormammu and himself into an endless repetition of the same moment in time. Faced with the prospect of his own personal Groundhog Day, Dormammu agrees to leave the Earth alone. The interesting thing is, by all accounts, Strange isn’t the strongest sorcerer in the world. Nor is he the most experienced. He has a spark of creativity and a few natural gifts, but that’s about it.

Anyone in IT should be all too familiar with this narrative. A willingness to use the tools at hand, along with some personal sacrifice to get the job done, is often how the day is saved. In the movie, the tool at hand was the Eye of Agamotto. In real life, the small but powerful tool could be anything from a shell script to an enterprise solution. The points isn’t the “small” part as much as how it helps cut straight to the heart of the problem with little effort or time wasted.

**Ask People Who’ve Stood in Your Shoes How They Moved Forward**

During his therapy, Stephen Strange is referred to the case of Jonathan Pangborn, a man who suffered an irreparable spinal cord injury, but who Strange finds one day playing basketball with his buddies. Telling Pangborn he’s trying to find his own way back from an impossible setback, Strange begs him to explain how he did it. This is what sets the hero’s path toward the mystical stronghold in Kathmandu.

In IT, we run up against seemingly impossible situations all the time. Sometimes we muscle through and figure it out. Sometimes we just slap together a kludgy
workaround. But sometimes we find someone who has had the exact same problem and solved it! We need to remember: many in our ranks have stood where we stand and solved what we hope to solve. There’s no need to struggle to re-invent an already existing solution. But to benefit from others’ experience, we must ASK.

That’s where being part of a community can pay off. I’m not talking about registering an account and then asking questions only when you get stuck. I mean joining the community, really getting involved, reading articles, completing surveys, adding comments, answering questions, and, yes, asking your own as they come up.

**Even Broken Things Can Help You Find Your Way**

On his way to the mystical school of Kamar Taj, Doctor Strange is accosted by muggers and ordered to give up his watch. Even though he is rescued from what appears to be a brutal beating, his watch isn’t so lucky. It’s only later we realize there’s an inscription on the back reading, “Only time will tell how much I love you,” indicating the watch is from Christina, one of the few people Strange has made a personal connection with.

While the joke, “Even a broken clock is right twice a day” comes to mind, the lesson I’m thinking of is a little deeper. In IT, we often overlook the broken things, whether it’s code refusing to compile, a software feature not working as advertised, or burnt out hardware, in favor of reliable systems and solutions. And this isn’t a bad choice.

But our broken things can still teach us a lot. I’ve rarely learned anything from a server running like clockwork for months on end. But I’ve learned a lot about pinouts, soldering, testing, timing, memory registers, and more when I’ve tried to get an old boat anchor working again.

Sometimes the knowledge I gained transferred. Sometimes it didn’t. But even if not, the work grounded me in the reality of the craft of IT and gave me a sense of accomplishment and direction.

**Withhold Judgment and Give Respect When Seeking Answers**

Standing outside the door to Kamar Taj, having just been saved from muggers, Strange is still glib and sarcastic about the nature of the environment he is in. Mordo stops him and says,

> I was in your place, once. I, too, was disrespectful. So, might I offer you some advice? Forget everything that you think you know.
Recently, I was involved in a discussion about monitoring containers. I said, “Maybe I’m being naive, but it seems like we already solved this problem. Only it was 2001 and we called it LPARs running on AIX.” There was some nervous laughter, a few old-timers got the joke, and the rest of the group explained how containers were completely different, and all the old stuff wouldn’t, couldn’t possibly, apply.

I wrote about this in the past, and the sentiment still holds true. If you’re not willing to give respect and credence to older ideas (if not older IT pros), then you’re going to insult a lot of people, miss a lot of solutions, and spend a lot of extra time fixing old problems all over again.

**Redundancy Is Your Friend**

In the movie, we discovered how the world is protected from mystical threats by three Sanctum Sanctorums, located in London, Hong Kong, and New York. When London falls, the world is still protected by the other two. Only after Hong Kong falls can the world be overwhelmed by hostile forces.

The message to us in IT is clear: failover systems, disaster recovery plans, high availability solutions, and the rest are all good things.

To say any more about this would be redundant.

**Find a Teacher and Trust Them to Lead You**

Stephen Strange travels to Kathmandu, to the mystical school of Kamar Taj, and meets the Ancient One. His mind is opened to the existence of magic in the world, and he begs to be accepted as a student. The Ancient One then guides Strange in his journey to master the mystical arts, monitoring his progress and helping him avoid pitfalls along the way. Later, she rebukes him by saying, “When you came here, you begged me to teach you. Now I’m told you question every lesson and prefer to study on your own.”

The correlating lesson for us in IT is the way many of us tend to fall into the trap of solitary study. We find our education in the form of online blog posts, web-based tutorials, and PDFs. But there is something to be said for having a teacher, a mentor who understands you; where you started, where you’d like to go, how you learn best, and what your shortcomings are. If you’re learning a single skill, self-directed learning is a great way to go. But when you’re thinking about your career, it’s worth taking the time to find a trusted advisor and stick with them. They’ll often see things in you that you cannot see in yourself.
Be Comfortable With Confusion

At one point in the story, Strange complains, “This doesn’t make any sense!” The Ancient One replies, “Not everything does. Not everything has to.” The lesson is Strange must let go of his need for things to make sense before he engages with them. Sometimes it needs to be enough to know something simply is, regardless of how. Or to accept something works a particular way, irrespective of why.

“Yes, but now I know how it works,” is what I say after I’ve burned hours deconstructing a perfectly working system. And while the education was possibly interesting, it may not have been important to do right then. When our need for things to make sense impedes our ability to get on with our daily work, we need to take a step back and remember not everything has to make sense to us now, and inevitably, some things in IT will never make sense to us.

When Events Pull You a Certain Direction, Take a Moment and Listen

In the middle of a fight, Strange reaches for an axe hanging on the wall, only to have his semi-sentient cloak pull him toward a different wall. Despite repeated attempts to get the weapon, the cloak insistently pulls him away, until Strange finally realizes the cloak is trying to tell him about an artifact to restrain, rather than harm, his opponent. (For comic book geeks, those were a more down-to-earth version of the Crimson Bands of Cytorrak).

Despite our best laid plans and deepest desires, sometimes life pushes us in a different direction. This isn't strictly relegated to our career plans. Sometimes you believe the best solution lies with a particular coding technique, or even a specific language. Or with your chosen hardware platform, a trusted vendor, or even a specific software package.

And yet, despite your rock-solid belief this is the best and truest way to achieve your goal, you can't seem to get it done.

In those moments, it's useful to look around and see where events are pushing you. What is over there? Is it something useful?

Even if Others Label it Useless, Be Proud of the Knowledge You Have

During surgery, the anesthesiologist quizzes Doctor Strange on his musical knowledge, asking him to identify Chuck Mangione’s hit, “Feels So Good.” Later, in an aside too fast for many in the audience, Strange tells his colleague he traveled to Kathmandu. She asks, “Like the Bob Seger song?” He responds, “Beautiful Loser album, 1975, A-side, third cut? Yes. In Nepal.”

No, having this knowledge didn’t help our hero save the day, but it was still a tangible part of who he was. Strange is a gifted doctor, an unapologetically arrogant ass, a talented sorcerer... and an unashamed music geek.
We in IT must remember we are whole people. We’re not just storage engineers or SysAdmins or infosec specialists. We have other important aspects of our lives, even if they aren’t central to the plot of our personal journey. They provide richness and depth of character. We shouldn’t lose sight of this, and we shouldn’t ignore our need for hobbies, interests, and non-IT outlets in our life.

**Don’t Confuse a Bad Habit That Works for a Good Habit**

The Ancient One observes Strange isn’t, “...motivated by power or the need for acclaim. You simply have a fear of failure.” He replies, “I guess that fear is what made me a great doctor.” She calls him on this little bit of b.s., saying,

> Fear is what has held you back from true greatness. Arrogance and fear still keep you from learning the simplest and most significant lesson of all.

Strange asks, “Which is?”

The answer? “It’s not about you.”

After 30 years in IT, I’ve come to realize our daily work is full of positive rewards for poor choices. We work long hours, come in early after a late night, check in on our days off, and learn new work skills on our own time. We do this because we are rewarded in both tangible and emotional ways for giving 110 percent, for bringing up crashed systems in record time; for closing the largest number of tickets, and more.

The rewards don’t make any of these behaviors good.

Sometimes putting in longer hours, or more effort, or rushing to help is a bad thing. Sometimes, but not often, and certainly not always. And our motivation for doing so—like Strange’s fear of failure—should be identified for what it is and dealt with honestly.

**RTFM Before You Try Running Commands**

After being firmly warned about the perils of manipulating time, Strange grumps, “Why don’t they put the warnings before the spell?” Later, he repeats this sentiment as the villain is hoisted on his own mystical petard.

Often, we find a potential solution and rush pell-mell into implementation without testing, or (as in the case with code we found in the middle of a long forum thread) without reading to the end to find out it doesn’t really address your issue and, in fact, breaks several other things. Or worse, discover some smart@ss who says the solution is to run `rm -fr /` as root. If you don’t read down to the next post, you may never find the warning telling you this erases all the files on your system.

This is the reason all IT pros should know the magical incantation, RTFM.
Being Flawed Doesn’t Mean You’re Broken

Kaecilius, the villain of the movie, points out how Kamar Taj is filled with broken souls to whom the Ancient One teaches “parlor tricks, and keeps the real power for herself.” While the second half of this sentiment is clearly not true, the first half has some merit. Look closely and you can observe how each character you meet in the mystical fortress is flawed, either externally (in the case of Master Hamir, who is missing his left hand) or internally (as with Mordo, battling his inner demons). More interesting, however, is how—even though some succumb to obstacles related to these flaws—none allow themselves to be defined by those flaws.

It’s obvious to the point of cliché to say none of us are perfect. Nor have any of us had perfect IT training, or career paths, or experiences. But those flaws, deficiencies, and missteps don’t invalidate us as people, nor do they disqualify us as credible sources of IT expertise.

Artist Allie Jenson once said,

I am proud of my flaws and mistakes.
They are the building blocks of my strengths and beauty.

In fact, the Japanese practice of Kintsugi is the art of taking flaws in an object and emphasizing them to create even greater beauty in the piece.

We need to remind ourselves the ways in which we live with—and sometimes overcome—our flaws are often what makes us special.

The Path to Mastery Isn’t Easy, But Simple

Sitting at the feet of the Ancient One, Strange despair of learning the secrets of the magic she offers. “But even if my fingers were able to do that,” he says, “How do I get from here…” (indicating where he’s sitting) “…to there.” (pointing to where she sits.) She asks, “How did you become a doctor?” He answers, “Study and practice. Years of it.”

Over the course of my 30-year career in IT, I’ve had the privilege to work with an astounding number of brilliant minds. These talented engineers and designers have unselfishly passed along hints and secrets daily. For that, I am sincerely grateful.

Even so, none of what we do comes easily. It requires, as Doctor Strange observed, study and practice, and often years of it to truly develop mastery. And usually in IT, the thing we’re trying to master is a moving target, morphing from one form to another as technology continues to evolve at a breakneck pace.
But despite this, the mastery we acquire is rarely as impossible as it feels on the first day when we attempt to write our first line of code, configure our first router, or install our first server.

**Even if Words Aren’t Spells, They Have Power**

In the moments before Strange exposes the secret of the Ancient One’s long life, she warns him, “Choose your next words very carefully, Doctor Strange.” Not heeding her warning, Strange barrels on. In doing so, he sows the seeds of distrust and anger, ultimately leading his friend Mordo becoming a lifelong nemesis.

It’s important to recognize how nothing Strange said was wrong. Nor was he wrong in challenging the Ancient One’s choices. But doing so publicly, and in anger, and using the words he did, created more problems than he could have ever predicted.

In IT, we place great value in the truth. But there is a difference between being honest and being insulting; between being assertive vs. aggressive; between uncovering the truth and exposing faults purely for the sake of diminishing.

The world has undeniably become more crass. Dangerously so, in fact. Not just as IT professionals, but as good faith participants in humanity, we have the ability and responsibility to change this trend, if we can. It means even when we understand the pure facts, we can nevertheless choose our words carefully.

**Never Doubt, Diminish, or Dismiss Your Value or Importance**

Denying magic exists, Doctor Strange exclaims, “We are made of matter and nothing more. We’re just another tiny, momentary speck in an indifferent universe.” This is the point at which the Ancient One opens Strange’s eyes to the infinitude of reality, and asks, “Who are you in this vast multiverse, Mr. Strange?” The question is not meant to diminish Strange, but to point out there is, in fact, a place and role and opportunity for greatness for every living being.

Walk into the convention hall at Cisco Live!, Microsoft Ignite, VMworld, or CeBIT, and you begin to grasp the enormity of the IT community. In doing so, it’s easy to believe nothing we have to say or contribute is new or even meaningful in any way. We fall into the trap of being a technological Ecclesiastes, thinking there’s nothing new under the sun.

The truth is nothing could be further from the truth. Our unique experiences, coupled with a willingness to share them, make IT such a vibrant profession and community of individuals. Our struggles provide the motivation to imagine otherwise inconceivable solutions. The intersection of our humanity and our abilities is where we create compelling stories to inspire the next generation of IT professionals.
It may be a geekily sin, but I didn’t grow up with an affinity for comic books or action movies. I was first exposed to the Marvel Cinematic Universe when my friends dragged me to see Captain America: The First Avenger. I knew little about the storyline but walked away thinking it was entertaining (and with a newfound crush on Chris Evans). I wasn’t fully invested in the intricacies of the MCU until my husband and I were on parental leave—we’re now making our way through the movies, chronologically, and my knowledge gaps are slowly closing.

While I’ve found each movie and its characters to be entertaining, my favorite crew has to be the Guardians of the Galaxy. Reflecting on recent discussions between the Head Geeks, there are so many parallels between the Guardians and their journey, particularly Volume 1, to our experiences in IT.

**Teams Come in Unique Packages**

A Flora colossus (a tree-like being), a brilliant raccoon, a brutish criminal, a human, and a green assassin walk into a prison and come out a team. Volume 1 brings together an unlikely group of personalities and skills. On paper, they shouldn’t work well together (in fact, several are looking to capture each other)—in action, they are a force to be reckoned with.
I haven't worked with as rag-tag a bunch as the Guardians, but I do believe the most diverse teams can bring out the best in each other. IT is responsible for their organization's technology portfolio, ensuring applications play (relatively) nicely, users can access the technology successfully, and both IT and the technology maintain high availability. Bringing together an unlikely team, such as a musician with a knack for Python, a former teacher with stellar organization skills, and a passionate data scientist, can lead to remarkable things. With varied degrees of expertise and wide-ranging experiences, IT can optimally support the business while keeping users productive and happy.

**A Knack for Creative Solutions**

Deferring to Rocket’s extensive knowledge and his 22 previous prison escapes, the quintet of criminals broke free of the Kyln. As with many problems, breaking free wasn't a straightforward solution. It took a security band, a Quarnyx battery, a prosthetic leg, and a lot of quick thinking in the moment.

I've grown to expect the unexpected. You can read all the blogs, talk with your colleagues, and create backup plans, but there will undoubtedly be scenarios you weren't equipped for. Generally, I find these are the experiences I gain the most from, as it pushes you to quickly adapt to create solutions for today and the future. At the heart of our work, we're innovators, finding creative ways to most effectively get the job done. Our solutions can range from determining the best way to implement a new VoIP system across the company, streamlining how we catalog and distribute hardware, or even something as simple as revising a knowledge base article. Regardless the task or problem at hand, we push the envelope, bringing clever workarounds to execute and progress forward.

**United by the Grind (Or an Orb)**

Quill thought he knew how much the Orb was worth, but none of the Guardians could have predicted its full value without Tivan. Once the Power Stone’s capacity for destruction was revealed, the Guardians banded together to stop Ronan and protect others. Unified by an affinity for money, revenge, the Orb, and friendship (and Groot), the Guardians worked better together for the galaxy, than on their own.

In IT, we're entrusted to keep the metaphorical lights on for our users. Our responsibilities and suite of technologies may differ, but we're bound by agility, humility, and a hunger to learn. With a regularly evolving technological landscape, we're intertwined in a continuous education loop to expand our mastery of the field. Beyond exposure to new and challenging situations, I've found many of our experiences are united by trust. Between hurdles, discoveries, and successes, our IT community lifts each other to deliver our best.
Ain’t No Mountain High Enough

As the first volume ends, and arguably the best movie soundtrack fades out, we’re left with a question from Quill, “What should we do next...something good? Something Bad? Bit of both?” This resonates with me and the attitude we bring to our work, daily. Will we unearth something incredible today? Maybe. Will we make a few missteps along the way? Absolutely. Will we learn to be better and improve how we support others? Undoubtedly. We each have different experiences and perspectives, but our differences make us, and IT, stronger.
“When the student is ready, the teacher appears.”

It seems inspiration has struck again, this time in the unlikeliest of cinema experiences. There amidst the rampant gore and adamantium-laced rage (not to mention the frequent f-bombs), I was struck by how “Logan” held a few IT gems of its own.

**Your Most Reliable Tool Could Become Toxic if You Can’t Move On**

Logan is slowly dying from the inside out. Adamantium, it seems, is not exactly surgical-grade metal, and the toxins have been leaching into his system. Held off by his healing factor, nevertheless the continuous presence of the poison has finally taken its toll and done what war, enemies, drowning, and even multiple timelines and horrible sequels could not.

One good lesson we should all draw from this is not to allow evil shadow-government agencies to lace our skeletons with untested metals.

But a more usable lesson might be not to hold onto tools, techniques, and even ideas when they become toxic to us. Even when they appear to still be useful, the wise IT pro understands when it’s time to let go of the old before it becomes a deadly embrace.

**When You See Yourself in the Next Generation of IT Pros, Give Them the Chance to Be Better Than You Were**

LOGAN: “Bad sh*t happens to people I care about. Understand me?”
LAURA: “I should be fine then.”
(Later) LOGAN: “Don’t be what they made you”
For many IT professionals there comes a tipping point at which the new and the shine and excitement and adrenaline wear off, and the ugly starts to become apparent.

Understand: a career in IT is no uglier than other careers. But possibly because IT is still, comparatively, such a new field; and also possibly because IT reinvents itself every decade or so; and also possibly because the cost of entry is relatively low—often just a willingness to learn and a couple of decent breaks—for all those reasons and many more, the honeymoon phase is more euphoric and the emotional crash when one begins to grasp the reality of the daily grind is therefore more noticeable.

And when the tipping point comes—often several years into one's career—it's easy to become "that person." The bitter grizzled veteran. The skeptic. The cynic who then tries to "help" by warning newcomers of the horror which awaits.

Or you become a different version of “that person:” the aloof loner who wants nothing to do with the fresh crop of geeks who just walked in off the street in the latest corporate hiring binge.

Either way, you do yourself and the world around you a great disservice.

In the movie, Logan first avoids helping, and, when the option is no longer available to him, he attempts to avoid getting emotionally involved. As an audience, we know (even if we've never read the "Old Man Logan" source material) this tactic will ultimately fail. We know we'll see the salty, world-weary X-Man open his heart to this strange child before the final credits.

What’s more, the movie makes it plain what opportunities Logan throws away in each moment where he chooses a snide remark instead of attempting to get to know Laura.

The lesson to us as IT professionals is we shouldn't let a bad experience (or even a string of them) make us feel bad about ourselves, or about our career. And we certainly shouldn't let it get in the way of being a kind and welcoming person to someone new to their career. If anything we—like Logan at the end of the movie—should try to find those small kernels of capital-T Truth and pass them along, hopefully in ways and at moments when our message will be heard and received in the spirit it is meant.

**Even When Your Experiences Have Made You Jaded, Hang On to Your Capacity to Care**

Tightly connected to the previous thought about encouraging the next generation of IT professionals is how we need to do things NOW which allow us to hold on to our capacity to care about people. As Thomas LaRock wrote, "Relationships matter more than money." I would extend this further: relationships matter more than a job, and they certainly matter more than a bad day.
In the movie, no moment exemplifies this as poignantly as the line which became one of the key voice-over elements in the trailers. In finding a family in trouble, Charles demands they stop and help. Logan retorts, "Someone will come along!" Charles responds quietly but just as forcefully, "Someone HAS come along."

**Get Out Among the “Regular” People, aka the Users**

At the start of the movie, we see Logan driving a limo for a ride-sharing type service. He’s out and among the people and for many folks this would make them feel more connected to the world around them—hearing stories, experiencing a moment in time which is a slice of their life. He is seen ferrying a business executive, a bunch of frat boys shouting “USA” as they cross the border into Mexico, a bachelorette party, and a family on their way to a funeral. As stark as the differences are between passengers, it’s not nearly as stark as Logan’s emotional disassociation with them.

Contrast this with a scene later in the movie, when Logan, Charles, and Laura sit down to dinner with the farming family they helped (as mentioned in my previous example). While dancing around the nature of the Xavier’s school for gifted children (i.e., mutants), Charles and Logan (acting the part of father and son) express touching affection both for their past life and each other. And in doing so draw out conversation from the family who has invited them into their home.

Later when they are alone, Charles tries to impress this difference on Logan:

CHARLES: You know, Logan? This is what a life will explain. A home, people love each other. A safe place. You should take a moment and feel it.

LOGAN: Yeah. It’s great.

CHARLES: Logan. Logan! You still have time.

The lesson in all of this is, as an IT professional, you need to get out with the real people in your environment. You have to become involved, to see what they care about and the problems they’re trying to solve. You can’t, as Logan did when he was driving the limousine, dispassionately observe them from afar and remain aloof. You need to connect, to communicate, and to share.
Persistent Problems Need to be Faced, Fixed, and Removed, Not Ignored as "Someone Else's Problem"

Near the beginning of the movie, the "reaver" Donald Pierce tracks down Logan and asks him for information about the nurse who rescued Laura from the facility where she and the other child mutants were being raised. Donald made it clear he wasn’t interested in bringing in Logan for the bounty, but simply wanted information.

Again, because of his drive to distance himself from the rest of the world, Logan took this at face value. Even though it was clear Pierce intended no good for whoever it was he was hunting, Logan was happy it just didn’t involve him.

And of course, the choice comes back to haunt him.

Now I’m not suggesting Logan should have clawed Pierce in the face in the first scene because, even in as brutal a movie as “Logan,” this still isn’t how the world works. But what I *am* saying is if you let Pierce be a metaphor for a problem which isn’t directly threatening your environment right now, but could come home to roost with disastrous results later, then... yeah, I’m saying you should (metaphorically speaking) claw the bastard through the eyeballs.

New IT Pros May Use Your Tools and Techniques Differently. Don’t Judge.

One of the interesting differences between Logan and Laura is how she has two claws from her forearms (versus Logan’s three), and one which comes out her foot. Charles speculates on the way females of a species develop different weapons for protection versus hunting. Logan seems unimpressed, even though he just witnessed Laura taking out at least three soldiers with her foot-claws alone.

The lesson for us is to remember tools are there to be used. If it achieves a desired result and avoids downstream complications, then it doesn’t matter if the usage diverges from “the way we did it in my day.” Thinking outside the box is a sign of creativity and engagement, two things which should never be downplayed.

The Next Generation Will Rise to the Occasion If You Give Them the Chance

Near the end of the movie, Logan is so incapacitated he passes out on the side of the road... and wakes up in a doctor’s office. How did he get there? Laura—the 11 year old who hasn’t spoken a single word so far; whose native language is Spanish; whose understanding of events happening to and around her was never 100% certain—managed to steal a truck, load Logan into it, and drive him back to town and get him into a kindly doctor’s office.

A few scenes later, she once again takes the wheel and completes the drive to the lookout station from which she and her fellow child-mutants plan to make the journey to “Eden.”
Finally, Laura and those same children get Logan up the side of a mountain and nurse him back to health.

The point is Laura and the rest of the kids were capable. They had skills and abilities beyond their mutant superpowers. Also, they cared. They cared what happened to this stranger not just because he was bleeding on the side of the road, but because they saw a chance to connect with another person like them and they took the risk. They even had the audacity to shave Logan’s beard into the shape it appears in the X-Men comic, not to mock him, but to create friendship through a shared joke.

Later, these same kids who giggled unabashedly at the sight of Logan in his iconic muttonchops can hold their own against an army of mercenaries. And in the end, Laura kills X24—not using her strength, speed, or claws but by thinking through the problem and literally finding the silver (OK, adamantium) bullet to end the situation.

As IT professionals, we need to remember the next generation might lack our experience, but it doesn’t mean they lack skills, intelligence, commitment, or even common sense. It doesn’t mean they can’t hold their own. It doesn’t mean they won’t rise to a challenge. It’s important for me to clarify this doesn’t mean I believe new team members should be forced into “sink or swim” scenarios. What it should remind us of is how we can look to them for backup while we recharge when our own tank is empty.

Better still, if we allow them to be a full part of the team, the entire team will be stronger for it.

**Powerful Tools Used Indiscriminately Can Hurt Everyone**

One of the key plot points in the movie is Charles’ degenerative mental state. In the movie he’s 90 years old and although he’s relatively lucid most of the time, he has moments where he loses touch. The problem is he’s a mutant with one of the most powerful psychic minds on earth, able (if you accept the “X-Men Apocalypse” movie as canon) to speak directly into the minds of every human on the planet while simultaneously having a separate conversation with the X-Men who are trying to save him (and the world). When Charles loses touch, lets his control slip even a little, the minds around him are at risk.

This sits at the heart of the “Westchester Incident” hinted at throughout the film. Charles lost control and people (possibly his students, except for Logan) died. In a hotel in Las Vegas he loses control again and everyone in the area is held in a kind of violent stasis, unable to move or even think until Charles is sedated. And then everyone affected is left weakened and sick for several minutes afterward.

The takeaway for us is Charles has (or perhaps it’s better to say he IS) a powerful tool. When used with control and finesse, our most powerful tools can perform amazing feats and literally save the world. But when used in an uncontrolled fashion, the results can be devastating.
By way of example, think about DNS. On Oct 16, 2016, an DDOS attack on one DNS company destabilized it to a point where the internet was practically shut down (at least for parts of the world) for hours. But a few months later, a single 22-year-old registered a domain name and effectively brought the damage from the #WannaCry malware to a complete halt.

**Having Tools Without Understanding History or Context Is Usually Bad**

On the flip side of using tools creatively (which I mentioned earlier) is using tools without understanding their context or history.

There are two analogs for this in the movie: first is how Charles can’t remember the Westchester Incident. He continues to operate under the assumption Logan is tormenting him for some reason, forcing him to live in a toppled-over well and then dragging him cross-country when they’re discovered. In reality they’d been hiding from the repercussions of Charles’ psychic outburst. But lacking this knowledge, Charles is himself ineffective in helping their cause.

The second example is “X24”—an adult clone of Logan and something of a mindless killing machine. X24 is Logan without context, without history, without a frame of reference. And therefore, without remorse.

Both cases exemplify the potential harm when a tool is operated by a user who doesn’t fully understand why the tool exists, or everything it’s designed to do. It’s nmap in the hands of a script kiddy who’s an actual child, just out to see if they could make something happen in the grownup internet.

As “experienced” IT professionals (that’s a code word for “old farts”) one of our key goals should be to providing history and context. As I wrote in *Respect Your Elders*, everything in IT has a reason and a history. Forgetting the history not only makes you less effective, it’s downright dangerous. But newcomers to our field aren’t going to learn any of this history from books. They’re going to learn it from us, but only if we’re open and willing to share.

**Lynchpin Team Members Become Force-Multipliers Even if Their Contribution Wasn’t the Most Impactful**

Earlier I mentioned the way the mutant kids were able to hold their own against an army of “reavers”—robotically enhanced mercenaries intent on capturing and/or killing them before they reached the Canadian border.

I should have mentioned they were just barely holding their own. And before long, most had been captured. It was only due to the timely arrival of Logan that they were able to regain the upper hand. And even then, Logan was the one who had to take on X24, their most power adversary.
Granted, it is Laura who ultimately ends the conflict with X24. Granted, it is the kids who disarm, disable, or kill the bulk of the soldiers.

But Logan’s appearance changes the tide of the battle. Before he arrives, the kids are being picked off one by one. The reavers are in control of the situation; they understand each kid and neutralize their abilities with precision. After Logan appears on the scene, the reavers are fighting on two fronts and it disrupts their efforts, causes them to make careless mistakes, and ultimately costs them the fight.

In this moment Logan is what is known as a “force multiplier”—a tool, technique, or individual which dramatically increases the efficacy of the team. In effect, a force multiplier makes a group work as if they have more members, or have members with a greater range of skills, than they actually possess. While the concept is most commonly heard within military contexts, many areas of work benefit from the presence of force multipliers.

In IT, we need to learn to acknowledge when a technology, technique, or even an individual (regardless of age or experience) is a force multiplier. We need to also understand a force multiplier isn’t a universal panacea. Something (or someone) which is a force multiplier in one context (day to day operations) isn’t necessarily going to have the same effect in a different situation (rapid deployment of a new architecture).

**It’s OK to Lie If You’re Telling the Truth**

There are times in your IT career when you’re going to need to lie. Not a little white “because the birthday cake is in the kitchen and we’re not ready for you to come in yet” lie. Not a bending of the truth. Full out bald-faced lie.

You’re going to get the email to disable someone’s account at 2 p.m. because they’re being let go; and then you’ll see them in the hall and exchange pleasantries.

A coworker is going to confide to you they just got an amazing job offer, but they’re not putting in notice for another two weeks; and then you’ll be in a meeting with management offering staffing projections for the coming quarter where you’ll allow the coworker to be part of the workload equation.

These lies are the truth-of-the-moment and must be treated as such. As much as it makes us uncomfortable, to do otherwise would create far more problems than bald-faced honesty might solve.
Going back to the dinner scene on the farm with the Munroe family, the exchange about the school goes something like this:

LOGAN: Careful, you’re speaking to a man who ran a school... for a lot of years.
CHARLES: Well, that’s correct. It was a... It was a kind of special needs school.
LOGAN: That’s a good description.
CHARLES: (indicating Logan) He was there too.
LOGAN: Yeah, I was in it too. I got expelled out three times.
CHARLES: I wish I could say that you were a good pupil, but the words would choke me.

From the Munroe’s point of view, this is a father and son reminiscing on their past. And you know what? It IS a father and son reminiscing on their past. All the things they say have an emotional truth to them, even if they’re a complete fabrication.

For us in the world of IT, where we have access to many systems and therefore many sources of insight which our non-IT coworkers don’t “enjoy,” the lesson is how we must endeavor to maintain the emotional truth of each situation even when we have to mask the details.

**Your Ability to Think Will Always Eclipse the Capability of Your Tools**

This descends into the realm of “who would win in a fight between Superman and God?” but I’m going to go there anyway. Logan/Wolverine is one of the darlings of the X-Men (and overall Marvel) franchise. He’s captured imaginations since his first appearance in 1974 and appeared in countless comics with the X-Men, Avengers, individual team-ups, and solo. But even within the context of the X-Men movie franchise, he’s far from the most powerful.

MAGNETO: You must be Wolverine. That remarkable metal doesn’t run through your entire body, does it?

No, it’s pretty clear the most powerful being—certainly in “Logan” but also in the Marvel cinematic mutant-verse—is Charles. The ability to contact every human mind on the planet is nothing to sneeze at, and it puts healing ability and metal claws to shame.
The thing I want you to take from this is this: your ideas, your thoughts, your ability to reason through a problem make you an IT powerhouse. Not whether your PC has a quad-core processor and 128Gb of RAM; or having an environment is running the latest container technology; or the fiber-to-the-desktop network you built.

Your value is what you do with your tools. Choose wisely. Think actively. Engage passionately.

**The Story of Your Career in IT Is About Who You Met, Who You Helped, and Who You Connected With**

The movie “Logan” was not, at its heart, about stabbing people in the head with metal claws, or car chases, or mutant abilities. While there was plenty of that, the core of the movie was about two men coming to terms with themselves and their legacy; how (and if) this legacy would affect the world after they were gone.

It is a movie about the very real father-son relationship between Logan and Charles—how they love each other but each also wishing the other could be “better” in some way. At the same time, it’s a movie where Logan and Charles understand they cannot change the other person, and we see the ways they’ve adapted and learned to live with them.

Above and through all this, it’s a movie about caring for others: about whether we choose to care or not; about how we express our fondness and even love; about how those feelings are received by the other person and reciprocated (or not).

Once again I’m invoking the blog post by fellow Head Geek Thomas LaRock: “*Relationships Matter More Than Money*.”

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**When you use this phrase [edit: “it’s not personal, it’s just business”] you are telling the other person that money is more important than your relationship. Let that sink in for a minute. You are telling someone, perhaps a (current, maybe soon to be former) friend of yours, that you would rather have money than their friendship. And while some jerk is now getting ready to leave the comment “everything has a price” my answer is “not my friends.” If you can put a price on your friendships, then maybe you need better ones.**

Why are you in IT? Odds are very good it’s not for the money. OK, the money isn’t bad, but no matter what the payout is, ultimately, it’s not probably enough to keep you coming back into the office day after day. You’re probably in IT for something else. Maybe you like the rush of finding a solution nobody else ever thought of. Or the pure beauty of the logic involved in the work. Or the chance to build something someone wanted but couldn’t make for themselves.
But underneath it all, you’re probably in IT because you want to help people in some meaningful way.

That’s the IT lesson we can take from Logan. The climax of the movie isn’t when Laura shoots X24 in the head with an adamantium bullet. It’s when, after everything they’ve been through, she clutches Logan’s hand and cries out “Daddy!” in her loss and grief, and he accepts both her name for him and her love for him, even if he doesn’t feel worthy of either.

We are here—on this planet, in this community, at this company, on this team, in this project, doing this job—to forge connections with the people we meet. To learn, mentor, befriend, lead, help, teach, follow, grow, foster, mentor, and so much more.

Everything else are just technical details.
I’ve watched Deadpool about a dozen times now, mostly on airplanes as I travel to various places around the world and Canada. Most of these viewings have been for research purposes. That’s right, I had to watch Deadpool again and again to write this post. You’re welcome.

Anyway, I didn’t need to see it so many times to know the writers of Deadpool MUST have had a SysAdmin in mind when they started writing. Don’t believe me? Well, let’s break it down a bit.

**Deadpool Is a Love Story**

Much like our careers, we love what we do. Otherwise, we wouldn’t be doing it.

**Language, Please**

There’s profanity throughout the movie, much like any ordinary day as a SysAdmin.

**It’s OK to Ask for Help**

There are times when you need to swallow your pride and head over to another cubicle and ask for help.

**Sometimes You Need to Wear Your Brown Pants**

Because when it happens, you’ll know.

**Timelines Are Confusing**

Anyone who’s needed to answer the question “what happened last night?” or “what changed?” knows this to be true.

**Maximum Effort**

Always needed, and always given.

**Ease Up on the Bedazzling**

Simple solutions often work best. There’s no need to recreate the wheel or rewrite your scripts when a new language hits.
Pizza Improves Any Situation
Having lunch with coworkers, especially those from other teams, is a great way to break through silos.

You Can Erase Stuff Written in Pencil
When you think you’ve done something great and won a prize is often when it turns out to be not so great.

Life Is an Endless Series of Train Wrecks
And DR exercises, planned and unplanned.

“Make it Big” Is the Album Where They Earned the Exclamation Point
Sometimes new releases of software, like SQL 2016, get us excited.

You Sound Like an Infomercial
When vendors email you blindly to sell you solutions you don’t need.

We Need to Subject You to Extreme Stress
Yeah, much like every day of your SysAdmin life.

Enjoy Your Weekend
That feeling when you’re on call by yourself for the first time.

Your Yearlong Plan Ends With the Wrong Guy Getting Dismembered
When everything goes wrong, and you end up in worse shape than when you started.

IKEA Doesn’t Assemble Itself
Neither does the network, or an ETL process. It’s a team effort.

Time to Make the Chimichangas
When there’s work to be done, and you know it won’t be easy.

Writing Notes to Others
When you leave comments in your code. These are notes to Future You.

I’m Totally On Top of This
When you’re not on top of anything, and everything around you is falling apart.

Four or Five Moments
What it takes to be a hero.

Don’t Drone On
People will stop listening or stop reading chapters like this one.
...I Learned From “Spider-Man: Into the Spider-Verse”
By Leon Adato

Wisdom can be gained from anywhere and anyone—even in dimension 1610.

People May Do the Same Thing You Do, But They Got Here Differently

The premise of the movie is built on the idea of Spider-Folk from different dimensions (Peter Parker’s Spider-Man, Miles Morales’ Spider-Man, Gwen Stacey’s Spider-Woman, Peni Parker’s sp//dr, the other Peter Parker’s Spider-Man Noir, and Peter Porker, the Amazing Spider-Ham) being brought into a single dimension (the home of Miles Morales). While each of these individuals embody, with slight variations, the abilities and ideals of the spider-themed superhero, it’s clear from the beginning the path each person took to their current state is very different. Peter Parker makes this clear when he tells Miles, “Remember, what makes you different is what makes you Spider-Man.”

The lesson for IT should be clear. Even on a team of equally qualified SysAdmins, network engineers, DevOps practitioners, or monitoring specialists (especially monitoring specialists, in fact), our abilities may be similar, but the path we took to acquire them is unique and personal. We’re at our best when we recognize and value those differences in perspective and approach, even as we appreciate the way our colleagues can execute as a team with consistency.
Everyone's the Star of Their Own Story

Everyone's the star of their own movie, not a sidekick in yours. This was clear from the start of “Into the Spider-Verse.” Each Spider-Person was used to being their dimension’s “one and only.” Even when they were in the same room, they maintained their individuality.

But one trope the movie avoided was the “No, *I’m* the one-and-only Spider-<Person>. You must be an impostor!” From the very start, the Spider-Folks understood they had to work together, leverage each other’s strengths, and support each other’s shortcomings.

This is an easy (and important) lesson IT practitioners must take to heart. Despite the idea of us all starring in our own show, we can be co-heroes in the larger story—shining when our individual skills are called upon, supporting others when they need it, knowing we aren’t diminished when we raise others up.

Perfect Doesn’t Exist. Or if It Does, It Only Exists Briefly.

The movie writers and the story itself confirmed the “real” Spider-Man—the one from the “our” dimension (Earth 616)—is the older, slightly downtrodden, slightly dadbod one. So, what about the first one? The Peter we meet at the start of the movie: blond, young, and far more put-together?

That was an idealized Spider-Man. An inspirational, but unrealistic model, to which Miles (as well as the city) might aspire, but never achieve. Because life is messy. Because in any plan, little things go wrong along the way.

Likewise, our “perfect” design crumbles in the face of real production load, undocumented data center layouts, and other things making up “just another day in IT.”

Just because the “perfect” Spider-Man (or network design) didn’t survive the onslaught of implementation hiccoughs (or Kingpin’s fists) doesn’t mean we can’t draw strength and inspiration from them. The key—which Miles learned, and we should learn as well—is to adapt to changing circumstances, plan for contingencies, and fall back on grit and determination to get through the hardest parts.

Even a Bad Mentor May Teach You Something

Life has handed Peter a few raw deals, and he’s worse for the wear because of it. Cynical and world-weary, he’s not the greatest teacher for Miles. Despite that, Miles is a ready student who is at a point in his life where he still has a sense of wonder but has the street smarts to see the lessons in people’s actions over their words. Miles’ willingness to believe in Peter’s ability to show him the ropes as Spider-Man carries both the student and the mentor through.
In a long (and hopefully fulfilling) career in IT, we can learn from many different people. While some of these mentors will be gifted with the ability to see us clearly, say the right thing at the right time, and point us in the right direction, far more will be well-meaning, but flawed individuals who may be pressed for time, short on patience, and caught up in their own poor choices. Nevertheless, they can teach us beyond serving as an example of what not to do. Being a student of life is one of the most valuable skills any IT professional can aspire to attain because it leads to more discoveries.

**Mentoring Can Teach You More Than Your Student**

Flipping things around, it’s not such a stretch to see ourselves in the role of the time-scarce and impatient mentor haunted by impostor syndrome. “Who am *I* to teach anything to anyone?”

Nobody is ever ready for responsibility when they first set out. In the process of learning-as-we-go, we often discover how much of a mentor and teacher we can be. One of the unexpected benefits is when we become better in the process. Better teachers, certainly, but also better professionals, team members, and even people.

Peter enters Miles' dimension nearly washed-up, ready to hang up his web shooters. While the need to return home gives him an immediate motivation, you still get a sense he'll go right back to the status quo once he gets back. In teaching Miles what it means to be a webslinger—both the ideal, as well as Peter’s more nuanced reality—Peter rediscovers and re-aligns his own inner compass. In the end, we see Peter take steps in his own life that were unthinkable before meeting his inter-dimensional protégé.

**Nobody Is a Teacher; Everybody Is a Student**

“Into the Spider-Verse” teaches that, by and large, everybody is a student. While you could also understand this to mean everybody has something to teach, the lesson and focus here is on ourselves. When we’re teaching, we can also learn.

From the big things, like the aforementioned life lessons Earth 616 Peter learned from Miles and Gwen, to the equally important life lessons Gwen learned about the value of being open to friendships, to the concept of a Rubik’s Cube that baffled black-and-white Spider-Man Noir, the characters learn from each other and the world they are thrown into, and are better for it.

**Never Assume You Know Everything About Someone.**

Miles’ Uncle Aaron is a pivotal character. We understand at the start of the movie he’s something of a black sheep—he’s not on speaking terms with his brother (Miles’ father), his job takes him out of town unexpectedly, and he’s not able to settle down. But he’s also the “cool uncle” Miles turns to for wisdom. The twist comes when we discover Aaron’s secret identity: the villain known as The Prowler, who is on
Kingpin’s payroll and happens to have the new Spider-Man in his sights. During one of the climactic fights, Miles and Aaron realize who the other is, in costume and out. In this brief second of recognition, Aaron decides to save, rather than kill, Spider-Man. The consequence for this is swift and, in a parallel to the “traditional” Spider-Man story we all know, we see the hero cradling his uncle’s dead body in his arms.

While “you can’t save everyone” is as much a part of the Spider-Man trope as colorful tights and swinging on webs is (the Spider-Folk tell Miles as much), there’s a more important lesson for the audience, especially for those who work in IT. Uncle Aaron had complex and personal reasons for staying away from Miles’ family, for becoming (and remaining) Prowler, and for saving Miles. These reasons weren’t obvious to anyone around him, but it didn’t make them any less important or real.

We can’t assume to know everything about a person. We may see their actions, but we cannot always understand their motivations, their reasons, the things driving them to this moment. My fellow Head Geek Thomas LaRock writes about this here, comparing people’s motivations to a “MacGuffin” used in storytelling.

Finding out the reasons and motivations of those around us may make it easier for us to accept their decisions and actions, but it’s not necessary. What is necessary is accepting the way each member of our team has reasons and motivations in the first place, even if we aren’t privy to them; that those reasons and motivations are valid (at least to them); and that we need to respect them. We don’t have to agree with them. But until we know what they are, we can’t dismiss them as pointless, useless, or non-existent.

**Inelegant Solutions Can Be Powerful**

At a few key moments of the action, help comes from an unanticipated direction—the more “cartoonish” abilities of Spider-Ham. Whether it’s a giant mallet he produces from I-don’t-want-to-know-where, or an anvil falling directly on the head of a villain, these great saves are played for laughs, but still have a lesson for us in IT.

“Have you turned it off and on again?” is an inelegant solution. But it works. As does restarting IIS to get the website back up. As do a million other “kludges” IT professionals employ every day, sometimes feelings guilty about it.

My advice (and I believe Peter Porker would back me up on this): don’t overthink it. If a solution works, it works. That doesn’t mean you shouldn’t also make time to resolve the underlying problem. But always be open to use every tool in your toolbox, even an oversized wooden mallet.
Simple Tech Used With Determination Can Be Very Effective

Closely related to the previous lesson is the way our commitment to solving a problem is more important than the techniques or tools we use to solve it.

In the movie, this is best exemplified by Aunt May. Horrified at the destruction being done to her home, she takes matters (and a Louisville Slugger) into her own hands, and makes Tombstone understand that wearing muddy shoes inside her house will simply not be tolerated.

The moral for us is twofold. First, our success as IT practitioners is less about the sophistication of tools, and more about our persistence in solving the problem.

On the flip side of this, when we see one of our colleagues, even someone we consider less “powerful” than we are (although anyone who judges Aunt May to be a pushover is in for a rude and likely painful surprise), we need to focus less on their technique or tools and more on their goals, putting us into the healthier and more productive role of supporting, rather than judging.

Trying to Re-Create, or Worse, “Fix” the Past Is a Fool’s Errand

The best villains are the ones who don’t see themselves as such, but instead have deeply seated motivations driving them to extreme lengths. In a different context, they might even be seen as a hero because of their determination to see a course of action through to the end. Such is the character of Wilson Fisk (aka Kingpin). We learn how, in a single moment, Fisk lost the love and trust of his wife Vanessa. This triggered a rapid cascade of events, leading to the death of both Vanessa and their son Richard. Fisk’s inability to reconcile the pain of his loss set him on the path leading to the catalyzing event of the movie—opening a rift between dimensions, looking for an instance where Vanessa and Richard did not die and pull those living versions to him and make his life whole again.

Each one of us carries memories of past moments where, looking back, we know we could have done better, or could have been better than we chose to be. In fact, in 2018 the THWACK® community spent an entire month discussing what they would have told their younger selves, if they had the chance.

Working in IT, there are pivotal moments where we realize we’ve made an error—sometimes the microsecond after hitting the ENTER key (c.f. the ohnosecond). These are moments we might wish to erase or undo. However, even if the technology existed, few of us would use it if it meant hurting someone in the process.

The lesson we can take from the movie is how damaging it can be to dwell on those past mistakes, replaying them over and over and saying, “if only.” I’m not saying regret will turn you into a criminal mastermind. But I am saying dwelling in a regretful past will lead to nothing good.
Being Multi-Lingual Is Normal

Miles Morales is celebrated for being one of the most compelling and relatable characters in comics, due in no small part because of his cultural heritage. He moves effortlessly between cultures, and one of the ways the movie shows this is when he flows from English to Spanish without hesitation (and without subtitles, which is part of my point below). Whether it’s the kids in his neighborhood, the teachers at his new school, or the villains crowding into Aunt May’s home in Queens, Miles is un-self-consciously fluent in the languages around him.

While I would love to make this lesson all about how I think all IT professionals should learn another language because it will help in ways they cannot possibly imagine, it’s not exactly my point. (But if you want to change your life, learn to speak more than one language. Really.)

My point is more about the way Miles’ multilingual nature is portrayed: it’s nothing special. Miles never acts as the interpreter to those around him. He never shouts, “Scorpion just said he’s going to knock you into next week!” He’s not there as a proxy for a non-comprehending audience. He’s there as a proxy for everyone else.

The lack of subtitles in the movie drives this home. Directors Bob Persichetti and Peter Ramsey made this choice purposefully, as if to say “This is a trivial aspect of this world. If it’s jarring to you, it’s on you, not the story. Get used to it. This is how the world works.”

The lesson is being multilingual is an IT thing too. Maybe not spoken languages, but modalities of computing. Cloud, hybrid IT, containers, software-defined networking, platforms-as-a-service—these are all part of the fabric of our work. Even if we’ve put off learning to code the same way we put off learning French, the time is now for us to take another look, start to familiarize ourselves, and begin to build our fluency. The Miles Morales-es of our organizations are going to come in un-self-consciously fluent, and it behooves us as colleagues and potential mentors to be partners in the journey.

Humility Is Its Own Reward

If honesty about those around us is the source of empathy, then honesty about ourselves is the source of humility.

Along with empathy, humility is the other great value to which we can aspire. Not the false humility of someone fishing for more compliments, nor humility coming from a place of from low self-esteem, but honestly understanding our own motivations, strengths, and weaknesses, and keeping them in perspective.

In IT, humility allows us to clearly see how our work stacks up against the challenges we face; how to best utilize the people, skills, perspectives, and resources at our disposal; whether our approach has a realistic chance of success or if we need to step back and consider a new path; and more. Humility moves ego out of the way and lets us see things for what they are.
Of course, Spider-Man (Peter, Miles, and the rest of the Spider-Folk) is innately humble. That’s part and parcel of the mythology. No, the place I found this lesson was how the movie was humble about itself.

From recognizing how certain aspects of the Spider-Man franchise were poorly conceived (Spidey-O’s cereal, “evil” Toby Maguire); or poorly executed (the 1977 TV series); or both (the Spider-Man popsicle), this movie is intent on letting the audience know it knows, accepts, and embraces the complete Spider-Man pedigree, warts and all. But the humility goes deeper than that.

After the third origin montage of the movie, you get the feeling the writers were never taking themselves completely seriously. You sense they are now making a commentary on the sheer number of Spider-Man origin movies there have been (and how unnecessary some of them were). Miles’ comment “How many of us are there?” is a direct reference to the insane number of reboots the franchise has undergone. And the title of the comic Miles’ dorm-mate is reading (“What If... There Was More Than One Spider-Man?”) shows the movie is aware of its own preposterous nature.

The overall effect ends up endearing the characters, the plot, and the narrative to us even more, in the same way “Spaceballs” and “Galaxy Quest” were to their respective franchises. The humility becomes a love letter to the story and the people who have invested so much into it.

**Understand How to Relax**

Played mostly for laughs, Miles’ initial inability to “let go” of things using his spider ability is a wonderful metaphor, especially for those of us in problem-solving roles, who often find ourselves asked to do so in stressful situations (like when the order entry system is down and the boss’s boss’s boss is hovering over your shoulder).

Whether it’s meditation, exercise, raging out to metal, travel, perfectly rolled sushi, looking at art, getting lost in a book, enjoying a fine Scotch (or wine, or chocolate, or a doughnut), or gaming non-stop, you need to know for the sake of your ongoing mental health what it takes for you to unwind. While many of us find most of our work in IT fulfilling, there will always be dark and stressful times. In those moments, we need to be able to honestly assess first that we are stressed, why, and finally, how to remove some of the stress so we can continue to be effective.

As the movie illustrates, not being able to let go can get in the way of our ability to succeed (hanging from the lights in Doc Oc’s office), and even hurt those around us (Gwen’s hair).

**When You Listen to Your Inner Voice Is When You’re the Most Powerful**

Since “Into the Spider-Verse” is largely an origin story about Miles’ transformation into his dimension’s one-and-only Spider-Man, much of the action focuses on him learning about his powers and how to use them. The difference between this and
many other superhero origin stories is the way Miles is surrounded by the other Spider-Folk, who are much more experienced. This comes to a head near the end of the movie, when the others decide Miles’ inexperience is too much of a liability and leave him behind. After an entire movie of Miles running, jumping, and awkwardly swinging from moment to moment, idea to idea, and crisis to crisis, this is where, for the first time, Miles finally stops and just is for a moment. He takes a few precious seconds to center himself, to understand where he is, and where he wants to be. In this moment, he is finally able to get in touch with all his abilities and control them.

Much like knowing how to relax and let go, being able to “check in” with ourselves in this way is incredibly powerful. Over the length of our IT careers, we will find ourselves surrounded, as Miles did, by people who are doing the same work as us but are vastly more experienced and confident about it. If we’re lucky, some of those people will be patient with us as we learn the ropes. But even so, being patient with ourselves—being able to stop for a moment in the middle of the cyclone of ideas, tickets, questions, incidents, doubts, system failures, and fears—will serve us well.

**Pushing Outside Our Comfort Zones Is Good, But If It Doesn’t Fit, Recognize It Before We Hurt Ourselves**

“Try harder than you think you can!” “Push yourself further!” “Do more than you planned!”

It seems like the message to try and exceed our limits is everywhere and is often a positive one. We should want to keep improving ourselves, and having a cheerleader (even an inspirational coffee mug) can be an effective way to reinforce this desire.

But there can come a point when our attempt to push through the discomfort in pursuit of growth becomes unhealthy. When we are no longer “lean and mean,” but “emaciated and ornery,” when we’ve trimmed the fat, stripped the muscle, and are now cutting into bone.

In the movie, this lesson becomes clear when we see the other Spider-Folk experience the slow but deadly effects of being in a dimension not their own. Their cells are slowly dying, and if they don’t get back home, they have no hope of survival.

In our dimension—where we’re more likely to be accosted by users claiming “the internet is down” than by plasma-gauntlet wielding stalkers—it would be nice if being dangerously outside of our comfort zone was as clear. Sometimes it is. Many of us have experienced the effects of long-term exhaustion, drained of motivation and unable to focus. The movie is teaching us about needing to first understand what is happening to us, and then work to find our way “home.”

As I described earlier, maybe it means centering ourselves and determining what we truly need; or maybe doing something relaxing until we’ve recharged. But to not do so, to keep powering through in the vain hope we’ll somehow find equilibrium, is as deadly to us (our career, if not our health) as being in dimension 1610 (Miles Morales’ home) when we belong in 616.
It’s Never Too Late to Try Again

I’ve already commented on the state of dimension 616’s Peter—his emotional state at the start of the movie, the condition of his relationships, etc. And I’ve also commented on how, by the end of the movie, he’s beginning to take steps to repair his life. As moviegoers, we’re invited to compare his choices to Wilson Fisk’s. His way of fixing his mistakes was to steal something that wasn’t his. We’re left to wonder, even if he had succeeded in spiriting a copy of Vanessa and Richard from another dimension, how would they survive? What would they think of him? So much about his choice only leads to more problems, more mistakes. It’s not that Peter’s path is easy. But if reconciling with Mary Jane is difficult (and even if it’s ultimately unsuccessful), it’s still the only way to move ahead.

I am reminded of two business-critical failures I observed, occurring a week apart. In both cases, a human error by a technician caused the failure.

In one case, the tech came forward immediately, owned up to what happened, and offered to help resolve it. Even after it was evident the failure extended beyond their skillset, this person stuck around to watch, so they would learn and know more next time. The incident was resolved, and nothing more was ever said.

In the other case, they tried to cover up the event, and their role in it. The truth came out quickly (never forget there are logs for everything), and the employee was literally walked out the door.

The lesson for IT pros should be clear. Even after a critical failure, we have opportunities to improve, fix, and ensure the outcome next time will be better. No technology failure spells “the end”—only our own attitude toward the failure can do that.

Final Lesson

In watching the Spider-Folk work together as a team, with all the similarities and differences in their abilities, attitudes, and personalities, I was reminded of an anonymous quote:

“In that which we share, let us see the common
prayer of humanity.

In that which we differ, let us wonder
at the freedom of humankind.”

If there is any lesson we can walk away with from this movie, it’s this: there is more about us that’s the same than there is that’s different; and both the similarities and the differences are the source of our strength as individuals and teams working in IT.
Inspired by a conversation I had with Leon about WandaVision and how its lessons reverberate through IT, I want to take a few moments to share my thoughts (and my enthusiasm) on the subject. WandaVision was a sometimes fun and sometimes emotionally jarring journey through time via sitcom styles. It explored grief and self-discovery in new and interesting ways. Wanda Maximoff’s powers bring a physical presence to the exploration of her mental state, which—while powerful—has its limits.

“What does any of this have to do with IT?” you may be asking. Well, let’s answer this question.

**Authenticity**

The show went through multiple eras of television sitcoms, and for each era, they filmed and implemented effects in the same way they were done originally. It benefited the storyline, as it benefits us in IT, to not forget where they came from.

**Vulnerability at the Edges**

As Vision explored the Hex and learned more about who he was and what was going on, he saw the effects of Wanda’s lack of attention—her power waned and brought things to a full stop. There was a lack of activity and a lack of updating, and this left them vulnerable from inside and outside the Hex. Agatha Harkness exploited this weakness from the inside, and Monica Rambeau learned to exploit the weakness from the outside.

This is a great analogy for tech at the edges of our awareness—servers hardly used anymore, running old hardware or software, things missed during inventory, etc. This lack of attention, awareness, and updating leaves vulnerabilities.
Learning Through Adversity

The entire show is an exploration of Wanda’s powers and her emotions, but we can do better than this. In the show, Wanda gets trapped in Agatha’s basement for a time, and Agatha shows off the symbols she’s using to dampen Wanda’s power and keep her trapped in the basement. Agatha is surprised Wanda isn’t familiar with any of them, considering her power. Later, Wanda uses those same symbols in her fight against Agatha, showing she learned from her time trapped despite the emotional turmoil she was going through.

This promotes learning on two fronts. No matter how much you learn/can do, you always have more to learn. Knowledge gained through errors, incident investigation, or any other terrible thing is valuable for future work. Despite the stress of going through it, the desire to assign blame, and the time you invest in resolving those issues, you learn valuable lessons through it all. Don’t let your experience lull you into believing you have nothing left to learn.

Ship of Theseus

Honestly, this could be a never-ending discussion on its own. BUT I will keep it brief. After all, I’m not Leon (written with affection). Vision uses this philosophical discussion in his battle of the mind. A large part of the show is dedicated to the question, “Who am I?” What makes us individual and unique?

In IT, this philosophical discussion takes place all the time. If I upgrade everything on a server, is it still the same server? If someone changes a line in my code, is it still my code? If I copy a script from THWACK or elsewhere on the internet and change a couple of lines, is it now my code? In monitoring, this happens all the time—an IP gets repurposed, software gets updated, etc. Everything is once again new, and the monitoring is, too.

Acknowledge the Past to Move Forward

A lot of the show is Wanda hiding from the truth of past events and finding ways to fool herself and those in her hex of influence. Her journey to acceptance and acknowledgement continues throughout, and she doesn’t reach her potential—she can’t become the Scarlet Witch—until she reaches this acceptance and learns from the past.

In IT, a mistake or mishap can feel monumental and even career-ending. Most of the time, it isn’t. We often feel cornered after a mistake and look to blame something or someone else to throw off the heat, but we can only move forward in our careers when we acknowledge, accept, and learn from our mistakes. I’ve made my share of mistakes in IT, and every one of them has pushed me to learn more, forced me to think and plan differently, and given me experience I wouldn’t have otherwise had. I’m sure if you’ve been in IT for more than five minutes, you can relate.
**Insist on Your Credentials**

I love the character of Dr. Darcy Lewis—and don’t forget the “Dr.” Several times throughout the show, she’s forced to politely insist on being treated with the respect she’s earned through her study and previous work. She’s confident and comfortable in her own skin, is fashionable and unapologetic, and never loses her sense of fun. She’s a reminder to not lose your sense of self and your unique identity and to always insist on the respect and credentials you’ve earned. I feel a kinship with this character and feel represented by her.

In IT, we earn our credentials—sometimes through college, sometimes through certifications, sometimes just over time and with experience. All are valid, so insist on yours. Also, it’s easy to lose some of your identity over time. From free swag from vendors and conferences to dress codes at work and the day-to-day grind, we can lose our sense of self, and it all starts to look much the same. We all start to look much the same. So, don’t lose yourself.

**“Thank You for Choosing...”**

Toward the end of the show, Vision says this lovely line: “Thank you for choosing to be our sons.” Never forget people choose to be with you through work and life. There’s a responsibility there as well. The responsibility to choose them back, to support each other, to learn from one another, and to continue deserving that choice. This is what I want to call the “don’t be a jerk” clause—don’t forget people are choosing you every day.

**“We Have Said Goodbye Before...”**

The full quote is “We have said goodbye before, so it stands to reason we’ll say hello again.” I’m no linguist, but to me this sounds like the concept of “Aloha” in Hawaiian and “Shalom” in Hebrew, at least as they’ve been described to me. I can’t speak with authority on either, but from what I understand, the idea is you never truly say goodbye. These words, and this saying, have a deeper meaning than simply hello or goodbye. They represent unity, compassion, harmony, and more. They’re philosophical concepts we can have entire discussions about.

In IT, I like how this relates not only to technology but to the people we come to know along the way. Despite changing responsibilities, positions, companies, etc., we manage to maintain relationships. Even those we no longer work with or talk to have lasting impacts on the things we do and say, even when we don’t realize it. On the other side of things, technology is constantly evolving—and we IT pros evolve along with it. All the technology that came before shapes new technology and the way we think about it.

Thanks for coming on this journey with me. As you can tell, I loved the show, and I love thinking about how the things we enjoy can change how we think about work and life.
The Falcon and the Winter Soldier took a deep dive into several important topics: trauma, self-confidence, and identity, to name a few. But the lessons the popular show imparts aren’t just for super soldiers and tech-assisted superheroes. Many of the things the show discusses apply equally to the IT heroes who keep their workplaces afloat. Here are some of the lessons I learned from the show that can help you achieve liftoff in your day-to-day life.

**Taking the Shield**

When Sam returns Captain America’s shield at the beginning of the show, many people feel disappointed. After all, he’s an Avenger—and not just any Avenger, but one hand-picked by Captain America to carry the shield. But one of the reasons why Sam doesn’t take up the mantle of Captain America is a familiar one to anyone who’s entered a new role in IT: Sam has a classic case of imposter syndrome.

When you enter a new role and someone says, “You have big shoes to fill,” it immediately puts a lot of pressure on you. This is especially true in IT, where you feel like the only outcomes of taking on a new job are to be hailed as a hero or regarded as an empty-headed poseur by your coworkers with no in-between. Falcon makes this doubly-clear with the introduction of John Walker, the so-called “new” Captain America, who’s quickly shown to suffer from his own case of imposter syndrome, and (to be quite honest) to be someone who doesn’t quite measure up to the moral standards of the job.
Meanwhile, back in our world of IT: not knowing how to fill those shoes right away can be intimidating, and it often prevents IT pros from stepping into a role they might really enjoy. Despite Steve Rogers’ confidence in Sam’s ability—or the confidence of anyone who pushes you in the direction of a new role—this doesn’t automatically translate into self-confidence.

But the truth is, almost no one steps into a new job and says, “Not only can I do this job easily, I can also do another job on top of it.” What’s important to know about imposter syndrome is something Sam eventually has to come to grips with: it’s OK to step into a new role knowing you may not have what it takes right away. It’s OK to say, “I don’t know enough about this right now, but I know that I can get there.” Whether it’s through completing trainings, getting new certifications, or bouncing a shield off random objects until you get the hang of it, it’s OK to start filling in your knowledge gaps as you go. You don’t have to know everything before you agree to take a new position.

**Unsung Heroes**

Isaiah Bradley is like a lot of IT pros in one key way: he’s an unsung hero.

If you’ve worked in IT for more than a few minutes, you probably know what it’s like to be an unsung hero. IT pros sometimes fly under the radar when they’re doing good work—after all, good work for an IT pro often looks like “just a normal day” for everyone else. One common problem in IT is we promote and give bonuses to the people who wake up at 2:00 in the morning because there’s a SEV 1 emergency, put out the fire, and work for 48 hours straight to get everything fixed. Managers notice this and want to reward it.

But the trouble is managers sometimes don’t notice—and therefore don’t promote and give bonuses to—the IT pros who get their work done at 4:30 in the afternoon, so there’s no late-night issue to deal with in the first place. Unlike with Isaiah Bradley, it’s not the intention of most managers to make sure these IT pros don’t get the recognition they deserve. Still, the hard work they’ve done goes largely unnoticed, and this isn’t okay.

Putting in the effort during normal business hours to avoid technical debt and make sure things don’t break should be rewarded just as much as putting out fires. We should encourage people who get their work done at 5 p.m. and are so confident about their work they have the confidence to push things to production on a Friday afternoon. I can already hear the IT pros reading this saying, “Not on a Friday afternoon! It’ll ruin my weekend!”

But the point here is if you aren’t confident in pushing something to production on Friday because you know it’ll cause issues over the weekend, then you shouldn’t push it to production on a Tuesday, either.
The good news in all this is there’s no statute of limitations for recognizing these unsung heroes. By the end of the series, Isaiah Bradley’s name, contributions, and sacrifices are made known to the world. And like Isaiah Bradley, when you recognize someone for their previously unnoticed hard work, it inspires others to work just as hard. Isaiah’s grandson, Elijah Bradley—in the comics, at least—only feels becoming a superhero is something worth doing after seeing his grandfather recognized.

**Don’t Let Problems Get In Your Head**

Near the start of the series, Bucky comes back into contact with Baron Helmut Zemo—the mastermind who set in motion the events leading to the break-up of the Avengers, who also had the keywords that had, in the past, controlled Bucky in his incarnation as the winter soldier. However, in “Falcon,” the trigger words don’t work. This is largely due to the therapy and healing he received from Black Panther’s sister Shuri in Wakanda.

The lesson I’m pulling from this is how certain problems can cause us to have unwanted (and undesirable) reactions. It might be a problem type (syntax errors in our code); or situations that occur at certain times (after hours); or issues from a specific vector (people walking up and asking an innocent question). Regardless, the problem is when our response is completely out of proportion to the issue itself. After one such incident, we may even ask ourselves, "Why do I let it get to me like that?"

Like Bucky in Wakanda, the path to resisting these triggers may be a long one, but it always starts with the important first step of this recognition. From there we must do the hard internal work to learn, grow, and improve.

Because allowing a problem to control us is never a good situation.

**Faking It Without a Plan to Make It Isn’t a Great Strategy**

From the moment he’s introduced, John Walker (the “new” Captain America) is clearly a man struggling with imposter syndrome. This isn’t far from the emotional state we find Sam Wilson in at the start of the series, struggling with how he could possibly fill the shoes of a “living legend.”

To be sure, both have experience and achievements that recommend them to the job. But whereas Sam chooses to sidestep, John (with the encouragement of his friend and his wife) tries to mask the doubt and push forward.

In and of itself, Walker’s choice isn’t a bad one. The flaw—and it’s an expression of his underlying character—is how he has no visible plan to overcome those doubts. In the end, it becomes his undoing.
The IT analog relates to situations where we feel out of our depth, unequal to the
task, or simply unprepared. In those moments, imposter syndrome can hit and hit
hard. Faced with crushing self-doubt, “just push through it” may be the only option
available to us, and that’s OK. What’s not OK is to stop there.

If our doubts are anything more than momentary; if we know they’ll haunt us and
affect our work and personal lives, we need to formulate a plan. We need to plan a
path forward, one in which we gain the skills, experiences, or insights that can put
those fears to rest (or at least quiet them down a decibel or ten).

Within the context of “Falcon…” this was the meaning behind Sam’s training montage
in the later episodes. The answer—or at least Sam’s answer—to “How can I fill Steve
Roger’s shoes?” was to learn how to master the shield; to hone his body; and to
combine his skills as the Falcon with a new Captain America persona—one that
would be authentically Sam Wilson’s take on the role.

Strength and Power Come in Many Forms
There are all kinds of strength/power, and “Falcon and the Winter Soldier” showed
us many of them.

• Karli and the FlagSmashers (and later John Walker) had the raw strength
  of the super soldier serum

• Helmut Zemo had a sharp intellect, not to mention the resources that
  come with wealth

• The Dora Milaje had technological advancements, superior combat
  training, the insight derived from a complex web of information systems,
  and the teamwork to fight seamlessly as a single entity

• Sharon Carter/the Power Broker had the power of knowledge and
  secrets about and against one’s adversaries

Despite all these strengths, each of them ultimately failed to achieve what Sam
and Bucky could. Why?

Throughout “Falcon…” a subtle lesson is how strength of character is the missing
piece that allows you to leverage other strengths to achieve goals. Yes, it’s trite. It’s
cliché. It’s embarrassingly Pollyanna. Yes, it’s not always like that in real life.

But part of the job of comics is to hold up a mirror to ourselves and let us decide
what and who we want to see reflected. There are worse ways to go.
In our tech careers, there are different strengths as well—everything from wide-ranging experience; to depth knowledge of command sets; to the ability to inspire others to achieve a goal; to intuitive understanding of an architecture or technology. But, like the heroes of “Falcon...” what will not only set us apart but allow us to achieve great things is not so much our raw strength as it is our character and willingness to hold to our moral compass in the face of adversity.

**Working With Someone Doesn’t Mean Liking Them**

Moving past the buddy cop cliché hyped by the trailers and an even cursory review of the series, it becomes clear at the outset that our two main protagonists, Sam and Bucky, don’t hate each other, but they also wouldn’t seek each other out. They make each other uncomfortable, both because of their personalities and because of their complex relationships with special abilities, super-heroism in general, and most importantly with Steve Rogers.

With all that said, and comedic bickering aside, they quickly fall into a relationship where they freely challenge each other’s excuses and force the other person to justify or reconsider their motivations. They also have a shared sense of commitment to whatever goal is in front of them and have specific requirements about how the goal is achieved, and what outcomes they will (and won’t) tolerate.

Finally, because both Sam and Bucky have their own baggage, they develop a relationship where each won’t allow the other shirk their responsibilities—to the mission, to others they respect, and, most importantly, to themselves.

Pair programming, agile development, and scrums are just the latest in a long line of team-based structures IT has embraced. The stereotype of the lone IT person working in a dingy windowless space lit only by the flicker of fluorescent bulbs is as incorrect as it is persistent. More often we’re working in pairs and teams that shift and change depending on the day and the issue at hand.

There’s every chance the folks you work with in these situations are easygoing, delightful, and mesh well with your work style. There’s an equal (if not greater) chance this isn’t the case. So how do you deal with a team member who is effective (if not skilled) but who you find hard to stomach?

I want to clarify—I’m not talking about abusive coworkers. While the so-called “genius asshole” is certainly a real thing (both in comics and in real life), I won’t for a moment suggest they should be tolerated, let alone encouraged. Technical acumen can be taught and nurtured. Someone who refuses all offers of counsel to change their behavior, however, should be shown the door.
That disclaimer aside, I think "Falcon..." has a lot to teach about respectful disagreement; about the difference between arguing about a goal and arguing about the plan to achieve the goal; and about ways we can work with someone we may not particularly like.

It’s a lesson I feel is urgently needed in these days of widespread contention, opinions presented as absolutes, all-or-nothing ultimatums, and my-way-or-the-highway leadership.

**The Comic Book Story Gets Real**

I’ve done a bunch of these, and most of the lessons are true, but also “light,” which is fine because it matches the tone of the comics themselves. But in "Falcon and the Winter Soldier," the writers allowed some of the “real world” shine through. It would be a disservice to their work, and the overall story, to leave those aspects of the series unmentioned.

To be clear, "Falcon..." isn’t super dark and morally twisted like "The Boys." Nor is it cynically world-weary like "The Watchmen." Neither is it un-necessarily “dark and gritty” simply for the sake of attempting to shed its super-colorful spandex-clad origins like “Batman vs. Superman.”

This is Marvel being true to the same sensibility as the comic books themselves. Early on, DC chose to place characters and events in fictional (albeit analogous) locations. This helped them avoid having questions like “Where was the REAL mayor when SuperBaddy was holding everyone hostage?” or “Why didn’t you have an issue about the hurricane that hit Florida last month?” Marvel, on the other hand, has always tried to integrate the “real world” into its stories as much as it was both feasible and logical. Marvel heroes live across the globe in real cities like New York, Beijing, Sedona, Calcutta, and Los Angeles. They’ve gotten involved in (or explained their conspicuous absence from) world events—everything from World War II to 9/11 to Hurricane Katrina.

Therefore, it’s both natural and welcome that in "Falcon..." we see characters acknowledge, wrestle with, and attempt to address the history of harm and consequences of poor choices, which is very much a reality of the non-comic book world in which we live.

I’m not naive enough to imagine a few comic book TV episodes can even begin to heal the iniquity that still exists across our country. The best it can do is, once again, hold a mirror up to it, and allow us to come to our own conclusions about whether we like what we see reflected back, and what we can do to change that image.

In "Falcon..." we’re brought face to face with the realities of systemic racism in America, and the ways that systemic injustice expresses itself for folks who are otherwise just trying to get by. We see the adaptive support systems communities of color have had to build despite a general lack resources.
In perhaps the most explicit example of this, we see how Sam's membership in the Avengers—who brought half the universe back from non-existence—still doesn't confer enough "credit" for him to help secure a loan at a local bank. It's the ultimate expression of the truth that for BIPOC folks, no amount of success will ever be enough to give them a "pass."

Much has been made of the fact that it's difficult (if not impossible) for children in under-represented populations to dream of pursuing a role or career if they never see anyone doing it who looks like them.

Less often mentioned, but perhaps equally important, is the impact on children in over-represented populations. Seeing people who don't look like them in certain roles and understanding those folks can be those things, too, is essential. It creates the knowledge that we who see our faces everywhere must make room, be gracious, and share the space.

Equally uncomfortable is the entire premise of the FlagSmashers. The storyline lays bare the United States' history of unsuccessful involvement itself in foreign affairs, only to withdraw involvement when it's no longer politically popular. And in doing so not only fail to achieve any lasting stability but leave the situation in a far worse state than it was before.

Finally, Bucky's past incarnation as the Winter Soldier, an assassin without conscience who killed without regret, isn't terribly far from some of the military operations our country has been involved in. Like Bucky, our attempts to simply forget past actions have led to nightmares which won't let us go. We need to find a way to accept (as Bucky does at the end of the series) that nothing will ever erase the harm we've done in the past. But the only way we can regain a measure of self-respect is to own our actions, admit this recognition to the people we've harmed, and be present as they work through their own grief and anger.
In Memoriam
By Leon Adato

When my family first moved into the orthodox Jewish world, we were invited to a lot of people’s houses for a lot of meals. The community is very tight-knit, and everyone wants to meet new neighbors as soon as they arrive, and so it was something that just happened. Being new—both to the community and to orthodox Judaism in general—I noticed things others might have glossed over. Invited to a third new house in as many weeks, I couldn’t contain my curiosity. I asked if everyone we had visited so far were related. “No,” came the reply, and our host asked why would I think that? Because, I explained, everyone had the same picture of the same grandfatherly man up on the wall.

Our hosts were now equal parts confused and amused. “That’s Rabbi Moshe Feinstein,” they explained. “He’s not our grandfather. He’s not related to anyone in the community, as far as we know.”

“Then why on earth,” I demanded, “is his picture on the walls of so many people’s houses around here?”

Image source: Rabbi Moshe Feinstein, from Wikipedia
EVERYTHING I NEEDED TO KNOW ABOUT IT, I LEARNED FROM STAN LEE

The answer was simple, but it didn’t make sense to me, at least at the time. People put up pictures of great Rabbis, I was told, because they represent who they aspire to become. By keeping their images visibly present in the home, they hoped to remind themselves of some aspect of their values, their ethics, their lives.

Several years later I was teaching a class of orthodox Jewish twenty-somethings about the world of IT. They were learning about everything from hardware to servers to networking to coding, but I also wanted to ensure they learned about the culture of IT. It started off well enough, but when I got to sci-fi in general and comic books specifically, I held up a picture:

“Can you identify anyone in this picture?” I asked. Their responses were especially vehement. “Narishkeit” (foolishness) said one guy. “Bittel Torah” (sinful waste of time) pronounced another. The responses were uniformly negative. Despite their disdain, I wasn’t going to back down.

“Well I can name them all,” I continued. “Every single one. And you know why?

Because these aren’t just characters in a story. These are my friends. And at a certain point in my life, they were my best friends. At the hardest times in my life, they were my only friends.”

Now that the class could tell I was serious, their dismissiveness evaporated, replaced by confused curiosity. “But not only that,” I continued. “Each character in this picture represents a lesson. A value. A set of ethics. That big green dude? He taught me about what happens when we don’t acknowledge our anger. That man with the bow tie? I learned from him how pure the joy of curiosity could be. And the big blue guy with the red cape that I’m sure you all know? He showed me that it was OK to tone down aspects of myself in some situations, and to let them fly free in others.”

Then I explained my confusion about the Rabbis on the wall, and the answer our lunch hosts gave, and how this was—especially for folks in IT—very much the same thing. Calling it narishkeit, I said, was as crass and insulting as it would have been for me to say putting up a picture of Rabbi Moshe Feinstein when you’re not even related to him was stupid.

Going back to the picture, I asked, “This picture has a name. Do you know what it’s called?”

*You’ll Be Safe Here.*
EVERYTHING I NEEDED TO KNOW ABOUT IT, I LEARNED FROM STAN LEE

I explained how author Dean Trippe came to write “Something Terrible” in the first place. At this point, my class might not have understood every nuance of what comic books were all about, but they knew it held a deeper significance than they thought.

That was how I explained what comic books meant to me—and to so many of us—to a bunch of orthodox Jewish guys, many of whom had never held, let alone read one.

That’s the world Mr. Lieber—or Stan Lee, as so many knew him—helped create. That’s the lifeline he forged out of ideas and dreams and pulp and ink. That lifeline meant everything to a lot of us.

Ashley McNamara may have put it best: “I repeated 1st grade because I spent that whole year locked in the restroom. The only thing I had were comics. They were an escape from my reality. It was the only thing I had to look forward to and if not for Stan Lee and others I wouldn’t have made it.”

It’s no exaggeration to say “Stan Lee” saved more people than all his costumed creations combined.

For a lot of people, that’s the story. Stan Lee, the man-myth, who helped create a comic empire and was personally responsible for the likes of Spider-man, Captain America, the X-Men, the Black Panther, and so on.

But for me there’s just a little bit more. For a Jewish kid in the middle of a Midwest suburban landscape, Mr. Lieber had one more comic-worthy twist of fate. You see he, along with his cohort—Will Eisner, Joe Simon, Jack Kirby (Jacob Kurtzberg), Jerry Siegel, Joe Shuster, and Bob Kane (Kahn)—they didn’t just SAY they were Jewish. They wove their Jewishness into the fabric of what they created. It obviously wasn’t overt—none of the comics were called “Amazing Tales of Moses and his Staff of God!” Nor were Jewish themes subversively inserted. It just... was.
EVERYTHING I NEEDED TO KNOW ABOUT IT, I LEARNED FROM STAN LEE

Comics told stories which were, if you knew how to listen, at once fantastical and familiar: a baby put in a basket (I mean rocket ship), sent off across the river (I mean galaxy) to be raised by Pharaoh (I mean Ma and Pa Kent). Or a scrawny, bookish kid from Brooklyn who gets super-strong, and what’s the first thing he does? Punch Hitler in the face. It really doesn’t get more Jewish than that.

Underlying every out-of-this-world story was another Jewish concept: "tikkun olam." Literally, this phrase means "fixing the world," and if I left it at that, you would understand some of its meaning. But it goes deeper than that. Tikkun olam means to repair the brokenness of the world by finding and revealing sparks of the Divine which infuse everything. When you help another person—and because of your help they can rise above their challenges and become their best selves—you’ve performed tikkun olam. When you take a mundane object and use it for a purpose which creates more good in the world, you have revealed the holy purpose the object was created for in the first place, which is tikkun olam.

Look at the weird, exotic, fantastical details of comic books: hammers and shields and lassos and rings imbued with power and potential just waiting to be uncovered and used to make the world a better place; teenagers who discover what comes with great power and embrace the idea of serving and saving without ever being repaid; outcast mutants who save the world even as it reviles them and rejects their right to exist; super strong aliens who hide behind mild-mannered facades to save people’s feelings, and then take off the disguise to save their lives; Amazonians who turn away from eternally beautiful islands and choose to run toward danger in the war-torn world of men.

If you look at all of that, and you don’t see the idea of tikkun olam at play, well, you’re just not paying attention.
Stanley Lieber showed the world (and me) how to create something awesome, incredible, amazing, great, mighty, and fantastic which could, for all its grandeur, remain true to the core values it started with. In fact, in one of his “Stan’s Soapbox” responses, he addressed this:

“From time to time we receive letters from readers who wonder why there’s so much moralizing in our mags. They take great pains to point out that comics are supposed to be escapist reading, and nothing more. But somehow, I can’t see it that way. It seems to me that a story without a message, however subliminal, is like a man without a soul. In fact, even the most escapist literature of all—old time fairy tales and heroic legends—contained moral and philosophical points of view. At every college campus where I may speak there’s as much discussion of war and peace, civil rights, and the so-called youth rebellion as there is of our Marvel mags per se. None of us lives in a vacuum—none of us is untouched by the everyday events about us—events which shape our stories just as they shape our lives. Sure, our tales can be called escapist—but just because something’s for fun, doesn’t mean we have to blanket our brains while we read it! Excelsior!”

Excelsior indeed.

To Stanley Martin Lieber, Zichrono Livracha. (May his memory be for a blessing)
Dedications

To Debbie
In the infinite multiverse of possibilities, there's no reality in which we are not together. Your love is the infinity stone my universe was built from, the essential force my entire existence is built upon. We are inevitable.

– Leon Adato

To my one and only son
May you never lose your individuality and your geeky spirit. I already loved all these superhero things, but I get extra enjoyment from sharing them with you. Video games, movies, comics, books, and more are made exponentially more fun by our in-depth conversations about them and the “what ifs” contained therein.

– Chrystal Taylor

To Quentin and Asa
Thanks for keeping me laughing, grounded, and for opening my eyes to all the good around us. I'd be lost without you.

– Liz Beavers

To my parents
Thanks, Dad, for being a real-life Superman. And thank you, Mom, for always reminding me that the word “NERD” looks like the word “HERO” if you squint your eyes just a little.

– Alex Taylor
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