THE SKEPTICS:

8 REASONS APPLICATION DEVELOPERS & CUSTOMERS MAY FIGHT CONVERGED INFRASTRUCTURE

What they won't tell you—the IT Professional—about their anxieties, and why they may fight you to keep their siloed infrastructure.

Zenoss®

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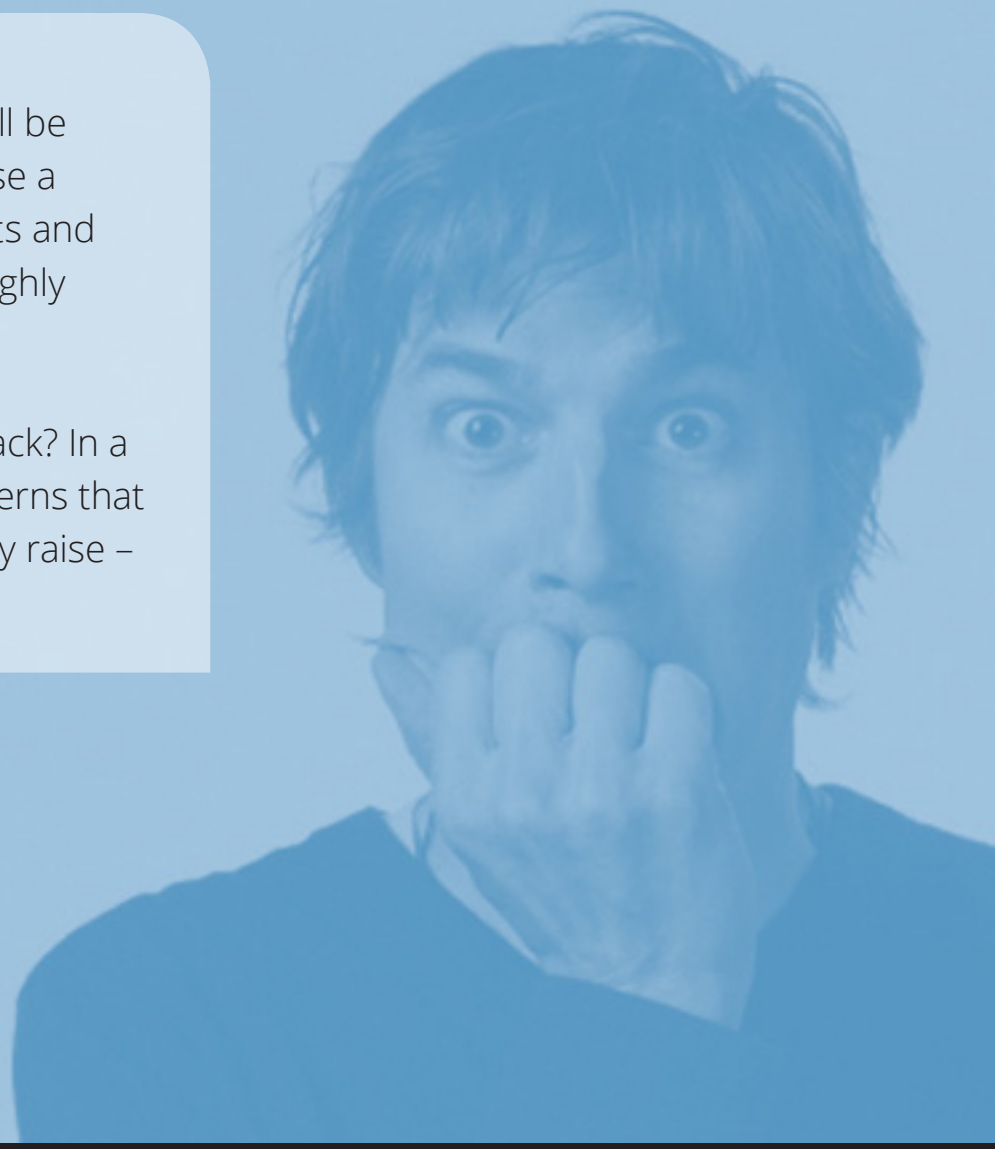
Converged Infrastructure has a lot to offer IT, but...

Your IT organization set a course for adopting Converged Infrastructure for some well-known business reasons. You'll be faster & more flexible. You'll optimize utilization. If you chose a FlexPod or Vblock, you can stand on the shoulders of giants and shout that your Converged Infrastructure has been thoroughly validated & put through its paces.

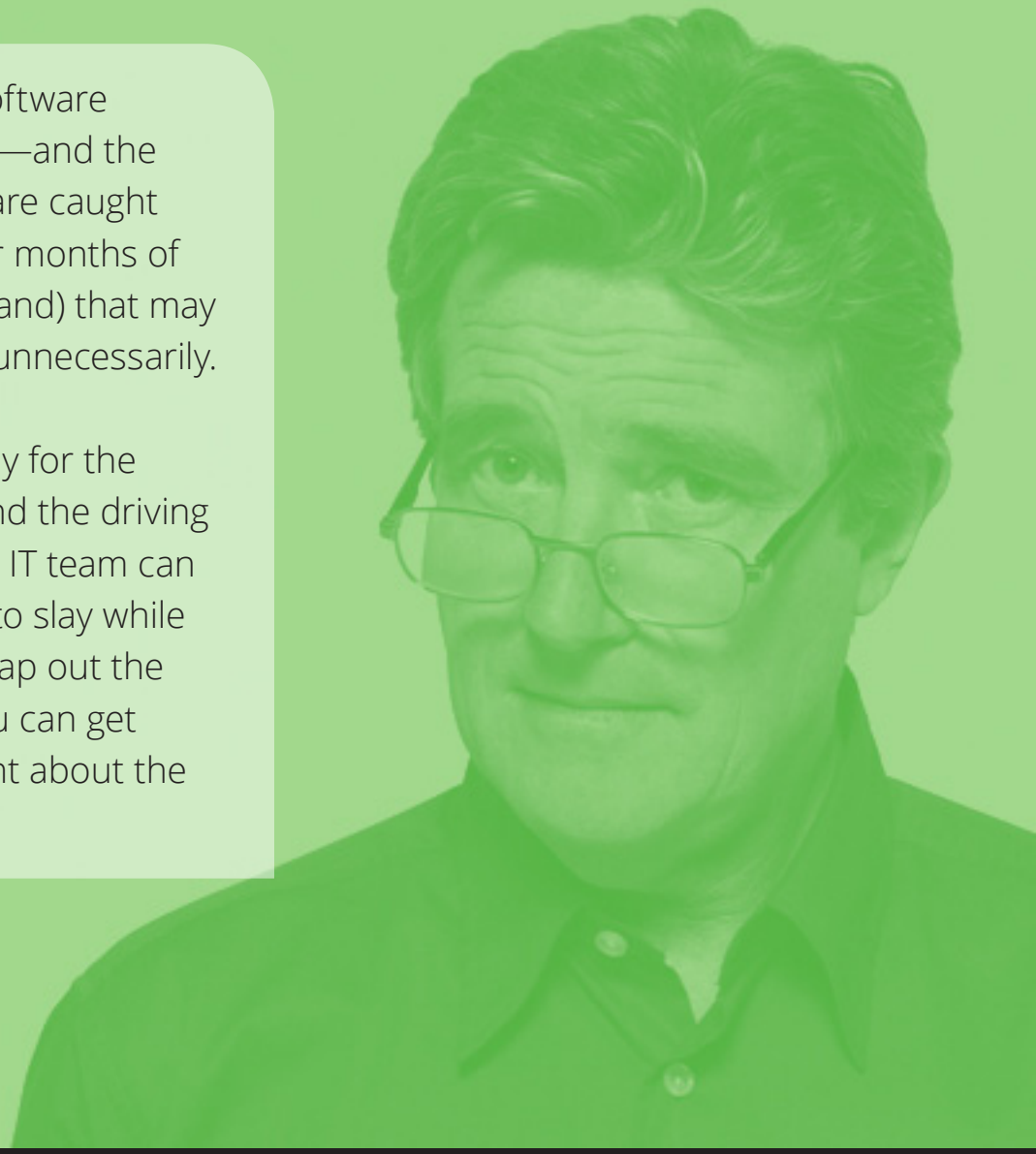
With clear benefits on the table, should you expect pushback? In a word, yes. Change = anxiety. And there are legitimate concerns that your customers (whether internal or external) will very likely raise – at exactly the wrong time. Unless you see it coming...



You'll need to anticipate the digging-in of heels among others

Don't take skeptical comments from business units, software developers, or customers lightly, because your project—and the expected business benefits—could be delayed if you are caught unaware. Or your team could get sucked into weeks or months of political battles (escalating right up the chain of command) that may rehash previous problems and get everyone spun up unnecessarily.

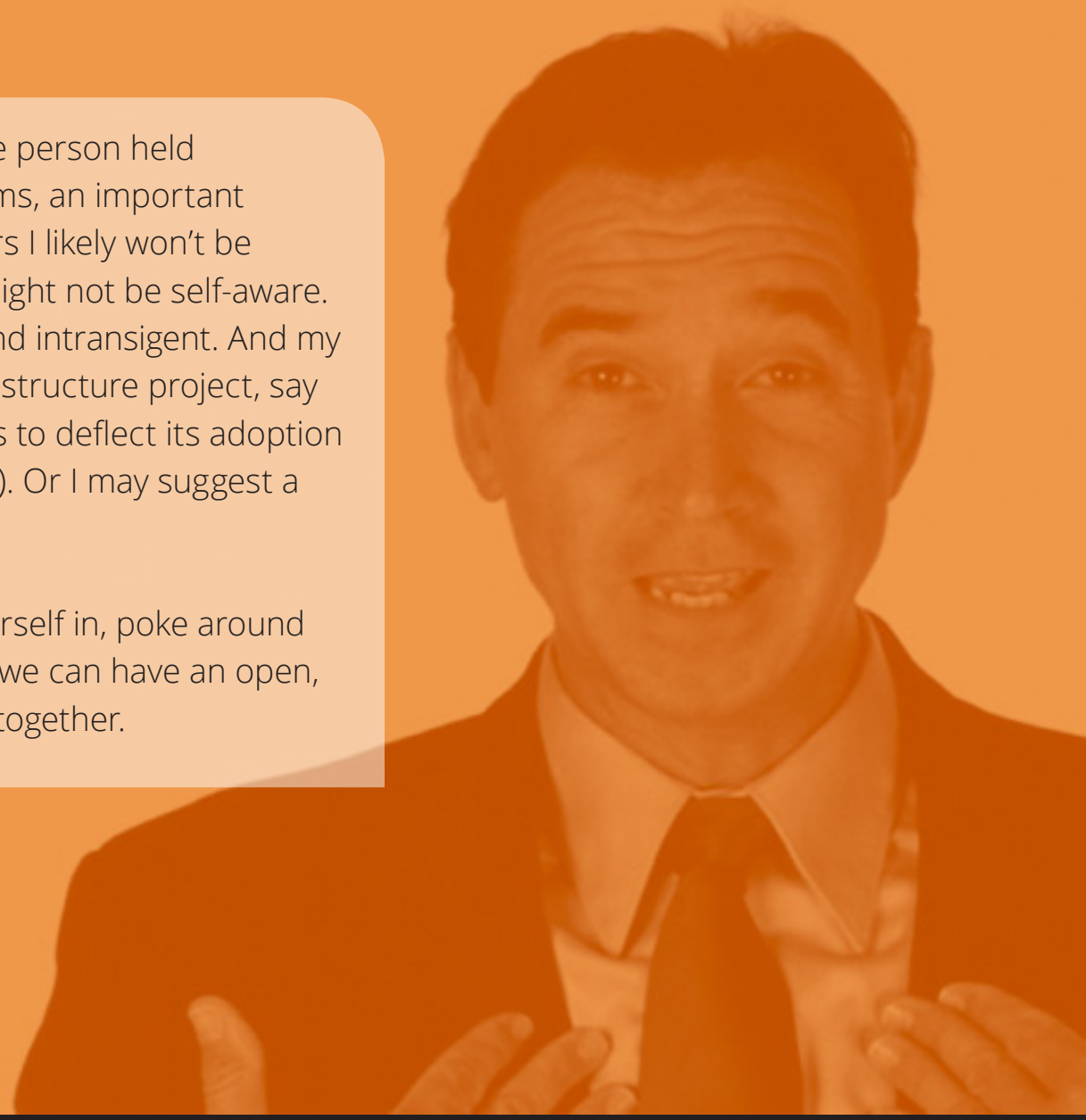
If instead you anticipate concerns, show some empathy for the pressures they are under, illustrate that you understand the driving factors, and bring recommendations to the table, your IT team can avoid a lot of headaches. You have your own dragons to slay while you keep the house standing at the same time you swap out the foundation. Things will go more smoothly for you if you can get everyone on the same page and feeling more confident about the transition to Converged Infrastructure.



Put yourself in my shoes for 5 minutes

If I'm the Software Development Manager, the person held accountable for our company's finance systems, an important service customer or the like, here are the fears I likely won't be upfront about. You might not think to ask. I might not be self-aware. But I can be stressed, grumpy, recalcitrant, and intransigent. And my instinct may be to block your Converged Infrastructure project, say "not in my backyard" (and work back-channels to deflect its adoption to some other poor department or customer). Or I may suggest a small deferral say for 18 or 24 months.

If that's not the situation you want to find yourself in, poke around in my psyche for a few minutes. Then maybe we can have an open, productive dialogue about how we can work together.



1 Somebody else's run-away app will starve mine for resources.

If I'm the director of a software development team, and you tell me I'll no longer have my own resources that belong only to me, I'm nervous. I start recalling mistakes I've seen colleagues on other teams make. I envision a day when I don't get my bonus because some "cowboy" on another team was negligent: their out-of-control code could swipe the legs right out from under me. Suddenly, my application isn't meeting our agreed service levels. We could have a public outage. My reputation and career could be impacted!

Maybe I think other teams are less disciplined than mine. Maybe I think their hiring standards aren't up to snuff. Or maybe the customers of other applications are a lot spikier in their usage than mine.

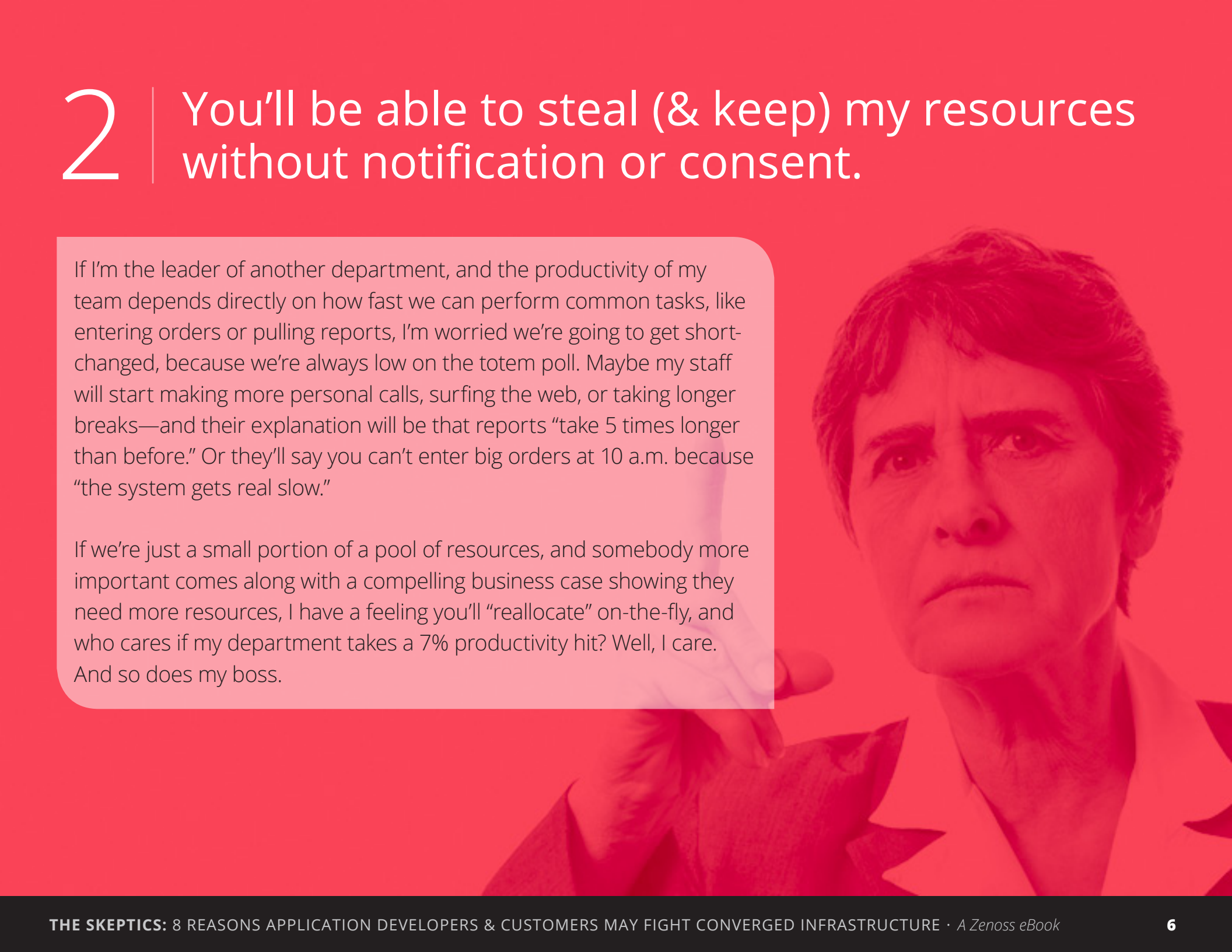
It's the standard tragedy of the commons. There's always the concern that somebody will take more than their fair, allocated share. And if it's not even thought through beforehand, but only the by-product of somebody's screw-up, I want no part in it.

I'm simply not comfortable being at the mercy of "sharing."

2 | You'll be able to steal (& keep) my resources without notification or consent.

If I'm the leader of another department, and the productivity of my team depends directly on how fast we can perform common tasks, like entering orders or pulling reports, I'm worried we're going to get short-changed, because we're always low on the totem poll. Maybe my staff will start making more personal calls, surfing the web, or taking longer breaks—and their explanation will be that reports "take 5 times longer than before." Or they'll say you can't enter big orders at 10 a.m. because "the system gets real slow."

If we're just a small portion of a pool of resources, and somebody more important comes along with a compelling business case showing they need more resources, I have a feeling you'll "reallocate" on-the-fly, and who cares if my department takes a 7% productivity hit? Well, I care. And so does my boss.



3 Negotiating for more compute, network, & storage will be exhausting.

If I'm an internal customer (regardless of what type), I know I'm in a constant battle for resources. That's why I over-order, so I'll be able to respond to the needs of my department or customers without going through the EXHAUSTING process of requesting more resources again in just a little while. If it takes me a month to get something, then I'd better figure out what I need for the next 12-18 months and get it upfront. If I don't, I'll be the one burning the midnight oil, coming to beg again and again and again.

With a shared pool of resources, it'll get worse! Now the pie will be only so big in a physical sense, not just a funding sense. I'll only be able to get more if somebody else's hard-won resources get subtracted from their capacity. That smells of more rancorous relationships that will make us look like quarreling children to our CEO. No thanks.

4 | I'll have to beg for help investigating issues.

No matter what role I'm in, if you provide infrastructure to me—and a whole bunch of others at the same time—it's a constant battle for attention. You've got your lean-and-mean IT team, and I have overworked folks, too. When we have our own, dedicated hardware, I know whom to go to when there's an intermittent issue—we've worked with each other before...on that hardware...with those configurations.

If we transition to your Converged Infrastructure framework, and I face an issue that's not "on fire" but is ongoing, maybe intermittent, and hard to find, I won't know who to go to. You probably plan to reorganize and retrain your IT staff. Which I get – I mean I know it's not efficient from a corporate standpoint to have a pocket of storage people over here and another pocket over there. But I know the guys in my pocket. They know I'm not the boy who cries "wolf." When there's a team whose purview is much wider, I'm going to have to build an unassailable case just to get someone to look into possible issues. My customers will think I've gotten lazy and unresponsive.

5 | Bet I won't get the granular visibility I need for my own troubleshooting.

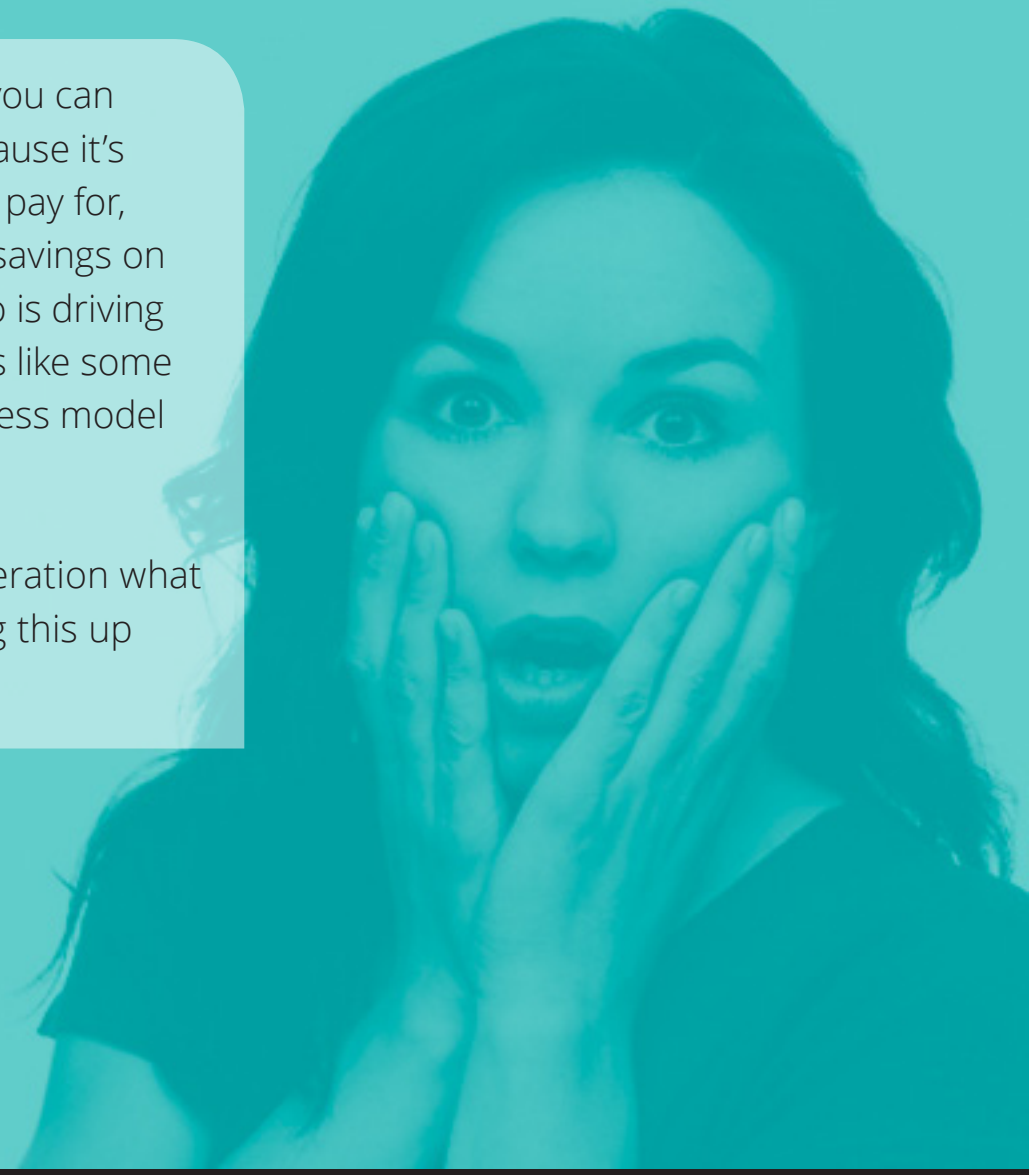
If I'm a developer or in the high echelons of Customer Support, it's in my job description that I dive into problem-resolution mode and fix things. I don't expect IT to figure it all out. But I have to have visibility; I have to be able to probe around—especially if I don't know what I'm looking for.

When I've had my own equipment, I've enjoyed access to the logs; I can SSH/RDP into my servers. It's my understanding I may not have that level of access anymore. That'd be like tying my hands behind my back. And sure, you'll say you'll get me what I need to do my trouble-shooting, but what are the chances you'll pull all the right data on my first request? I want self-service. I don't want to have to stand in line each time I need something. Especially when I'm in crisis mode. Otherwise, my boss is going to start doubting my skills. And that's not ok with me.

6 I see cloud outages all over the news. Why would we want one here?

Whether I produce or use a critical business application, you can bet I've heard of "the cloud." Everybody talks about it because it's (supposedly) cheap. But you and I know you get what you pay for, right? It's cheap until it fails, and then you blow your cost savings on damage control, customer credits, and lost business. Who is driving this cost-cutting stuff? Surely we don't have to cut corners like some fund-it-yourself start-up that doesn't have a proven business model yet. *That's* what the cloud is for.

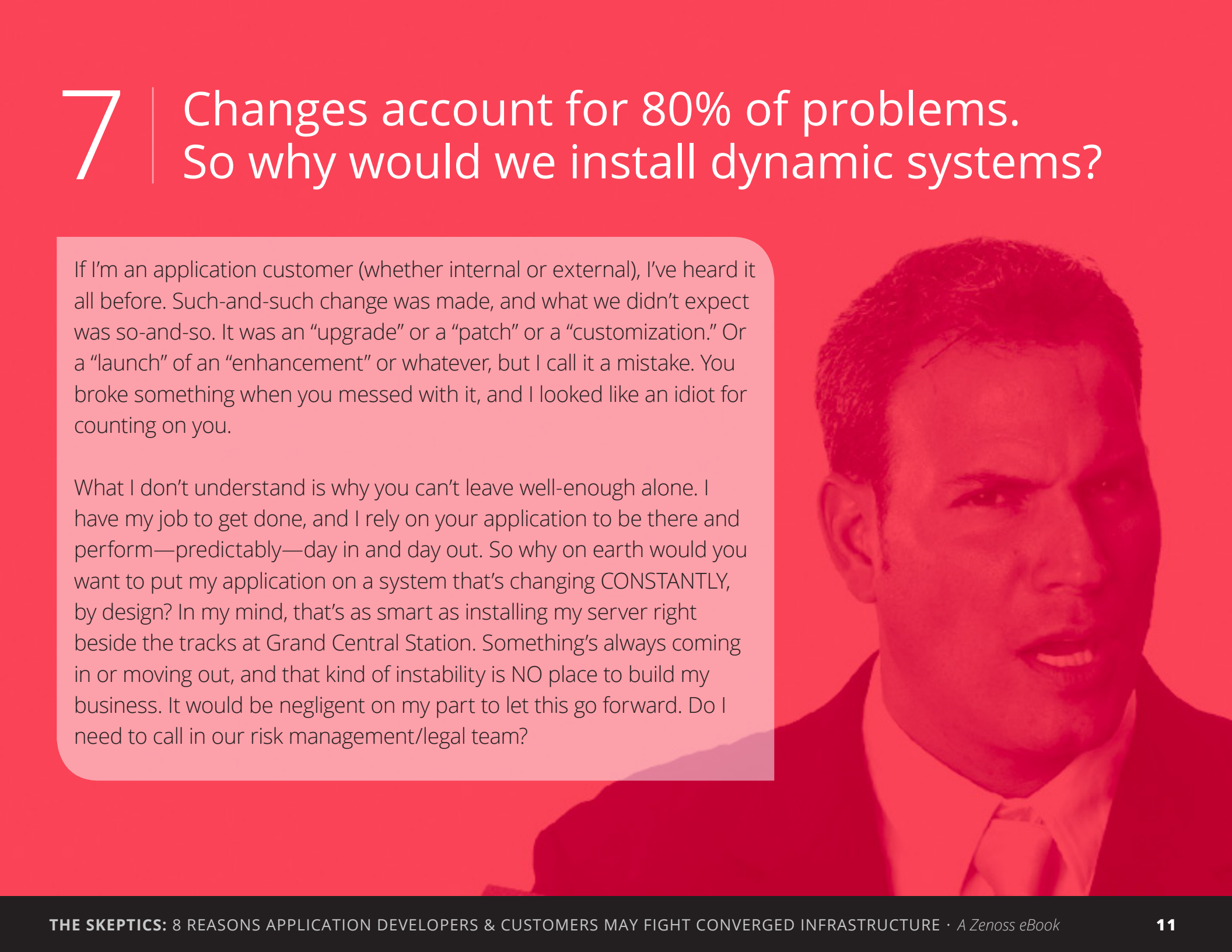
I don't think your leadership has really taken into consideration what a cloud outage would mean to our business. I'll be taking this up with them.



7 | Changes account for 80% of problems. So why would we install dynamic systems?

If I'm an application customer (whether internal or external), I've heard it all before. Such-and-such change was made, and what we didn't expect was so-and-so. It was an "upgrade" or a "patch" or a "customization." Or a "launch" of an "enhancement" or whatever, but I call it a mistake. You broke something when you messed with it, and I looked like an idiot for counting on you.

What I don't understand is why you can't leave well-enough alone. I have my job to get done, and I rely on your application to be there and perform—predictably—day in and day out. So why on earth would you want to put my application on a system that's changing CONSTANTLY, by design? In my mind, that's as smart as installing my server right beside the tracks at Grand Central Station. Something's always coming in or moving out, and that kind of instability is NO place to build my business. It would be negligent on my part to let this go forward. Do I need to call in our risk management/legal team?



8 Ultimately, I'm accountable for my application's performance & don't want to be at the mercy of others

People are counting on me for their livelihoods, whether I'm an internal customer or an external one. I want to be master of my own destiny. This means ownership and accountability for EVERY portion of my stack. Yes, I rely on the electric company. And brownouts are painful, right? I don't get a "pass" on my results just because of circumstances like this. Which is why I like to control what impacts me.

I don't see any compelling reason to entwine my performance further with the rapidly-changing, random requirements of others. Let's attack your IT problems in some other way, ok? Now I'm going back to thinking about MY challenges, and I don't want to discuss it anymore right now. Go back to your drawing board.

Bring recommendations to the table

Now you know more about the potential concerns of colleagues and customers facing a transition to Converged Infrastructure. You might discuss these behind closed doors with your IT team. But arm yourself with the suggested solutions below before you wade into a dialogue with your software team, your internal business application customers, or your external Service Provider customers.

1

CONCERNED PARTY:

Somebody else's run-away app will starve mine for resources.

IT recommends:

We used to procure the hardware you specified, and discussed it only when you reported a problem, right? With our current tool set, it's true we probably couldn't tell you how your allocated infrastructure was performing in a converged environment. But we're proposing to adopt Zenoss, which provides a dashboard for each "tenant" application. This tool can see all the components that support you. So we (and you through a "tenant portal") would get alerted if your application performance degrades or is put "at risk" because a component is getting overtaxed. We'd both have access to "as-it-happens" and historical data, to double-check utilization, latency, transfer rates, etc. If a neighbor application misbehaves within Converged Infrastructure, we'll also have the software to quickly migrate it elsewhere.

2

CONCERNED PARTY:
You'll be able to steal (& keep) my resources without notification or consent.

IT recommends:

It sounds like your team has concerns about performance at certain times, and it's our plan to provide you with more IT transparency and resiliency. We're reframing our IT processes with a tool called Zenoss so we can provide internal/external customers with the real-time application performance metrics that matter to them. After we show we can proactively manage this application health data, we'll all feel more confident allocating resources on-the-fly. With Converged Infrastructure, IT would have flexibility to provision you extra resources when you need it, like at End of Quarter. When not utilized fully, extra resources could be redeployed to another area, helping the organization (and our stock value) overall.

3

CONCERNED PARTY:

Negotiating for more compute, network, & storage will be exhausting.

IT recommends:

Actually, you're going to find resources a lot easier to get. It won't be about who makes the biggest stink. With Zenoss—the tool we'll be using to monitor your application—you'll have data to justify more resources. You can present your web response time, your query performance, etc. and say you need more memory on your database server, and you can prove it. It's hard to argue with data, especially when you have both real-time and historical data. Plus we'll have visibility into which groups are using only 10% of their allocation, and wouldn't be impacted if adjustments meant they now use 30%.

4

CONCERNED PARTY:

I'll have to beg for help investigating issues.

IT recommends:

Oftentimes, you don't know what specialist you're going to need up front, right? That's a reason why we ask so many annoying questions before we can assign you someone, and why you get juggled from one to another (which we know you hate). But with our new tool, we'll have the capability to see a ranked list of potential root causes for any application availability or performance issue. So we can assign someone who most closely matches the area of concern. In fact, a specialist may get notified & assigned to you before you even notice the problem.

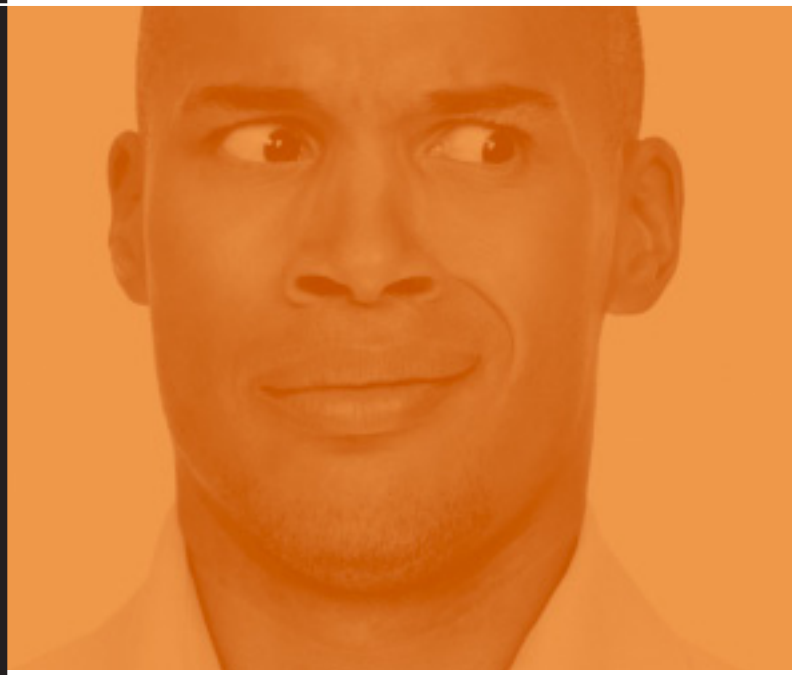
5

CONCERNED PARTY:

Bet I won't get the granular visibility I need for fast troubleshooting.

IT recommends:

Because a holistic tool like Zenoss can show you all the resources that define your application, AND point any problematic components, you'll actually get more granular visibility. Intermittent issues are easier to debug when their occurrence is permanently noted in the Zenoss event log. You can compare real-time data to historical data at any time. You can also specify application messages for the tool to watch out for, notifying a member of your team, or ours. Additionally, IT is not here to take away the access you need—such as SSH/RDP—instead, we'll provide the agility the company is asking for.



6

CONCERNED PARTY:

I see cloud outages all over the news. Why would we want one here?

IT recommends:

Public cloud outages get a lot of press play, don't they? When Gmail is down for an hour, or Amazon Web Services is degraded for a day, any user has a right to tear out their hair. Amazon may give you status updates and information, but you never really know what is going on or how they are trying to fix it until the post-mortem blog post. But a private cloud is different. [For internal customers] We ultimately report to the same individual, and strategically plan our capacity and make corporate commitments fully informed of your needs. And the monitoring tool we've chosen, Zenoss, will provide you the transparency you can't get with Amazon. [For external customers] You came to us instead of Amazon because of the value-add we can provide above their basic outsourced hardware. One of the valuable capabilities we have is the ability to show you exactly what's happening with your infrastructure in real-time. There's no ambiguity; you'll see what we see, via a "tenant portal" that shows how we're performing compared to our Service Level Agreement, and notes any events that impact your application(s).

7

CONCERNED PARTY:

Changes account for 80% of problems. So why would we install dynamic systems??

IT recommends:

All change has risk, yes. And the pace of change is increasing, and I know you feel that with the increasing demands of your customers, too. We are investing to get better at managing change, because if our competitors adapt more quickly than we do, we won't be able to continue offering our compelling products when you need them, and at prices you can afford. So we've done our homework and the Converged Infrastructure solution we're proposing isn't just capacity, it includes added capabilities to provide better assurance to you, our customer. We're implementing a tool that will give you real-time visibility into the health of your application(s), and into the underlying infrastructure. We'll see all of this, too—and in a way—"through" your lense. So we'll be able to see (better than ever before) any place where your service might be put at risk. And we'll be able to make positive changes more quickly, to shore-up an area that's overtaxed because of higher usage or a new feature, etc. Let us show you what we have in mind, because we think you're going to feel a lot more confident with the holistic solution we're proposing here.

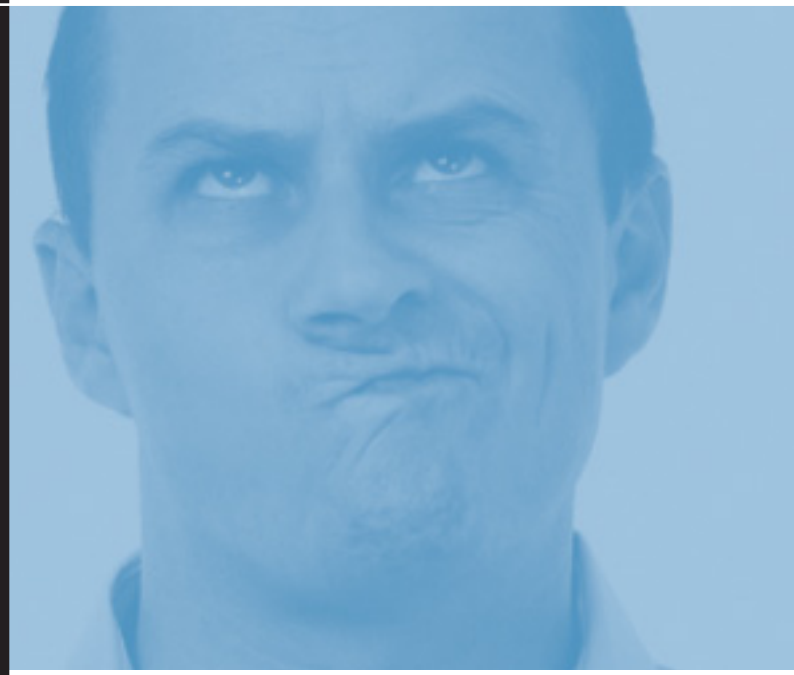
8

CONCERNED PARTY:

Ultimately, I'm accountable for my application's performance & don't want to be at the mercy of others.

IT recommends:

I can certainly understand that you only see risk here, and don't yet see the benefit to you. [Namedrop (the highest executive champion, preferably on the business side, that you have)] is keenly interested in additional agility that Converged Infrastructure can deliver the organization as a whole. We're prepared to make a very large investment here, and you could very well end up with more resources than you have now. Plus, of course, since you rely on Corporate IT already, you will ultimately benefit from anything we do that makes us a stronger, more flexible and resilient provider to you. Let us show you how we're planning a holistic solution that will actually give us BOTH better visibility into how and why we're performing as we are to our SLAs, help us find & fix issues faster than before, provide us new capabilities to prevent issues, and ensure both parties have the data needed to discuss both capacity planning and SLA compliance each time renewal contracts come due.



Now go forth and Converge... responsibly

Remember, IT professionals: with great power (knowledge is power, right?) comes great responsibility. Let's not belittle our application developers and their concerns; they are valid concerns that deserve resolution. (And never, ever belittle customers—that'd be a career-limiting move for sure.) Now that you've taken this peek inside their brains, and seen some of their deepest professional fears, go build a way forward that's constructive for all. Keep focused on what you and they have in common: the goal of creating real value out of **information + technology.**

The Zenoss Approach

Zenoss provides unified monitoring for physical, virtual, and converged infrastructure. As a commercial open source company, Zenoss offers the benefits of a growing open source community with the confidence of a commercially-backed solution. Zenoss utilizes a real-time service model (RTSM) that is object-oriented and maintains key relationships between your dynamic infrastructure including virtualization and cloud. The RTSM is combined with performance and availability monitoring and integrated with a high performance event management solution.

Additionally, Zenoss provides an open and extensible solution via our ZenPack framework. ZenPacks allow for unparalleled customization and agility that is both supportable and can be contributed to the broader Zenoss open source community.

Finally, Zenoss is moving beyond elemental monitoring to a service-based approach that provides for service impact and deep root-cause analysis. This approach leads to faster MTTR and service assurance across your entire infrastructure. Better yet, all of this data is made available via an advanced analytics solution that provides a business intelligence layer for your infrastructure.

About Zenoss

35,000 of the world's largest IT infrastructures such as LinkedIn, Los Alamos Labs, and Rackspace depend on Zenoss monitoring software to guarantee uninterrupted service to their customers—both internal and external. Leaders at these institutions enable revenue growth and cut costs by consolidating onto a single unified IT operations platform from which to manage their hybrid networks of on-premise servers, storage, and networking equipment, alongside virtual and cloud infrastructures. IT teams gain 360° visibility as to the stability and capacity of their IT operations, and their business, academic and government counterparts assure delivery of mission-critical services.

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About the Author

Jennifer Darrouzet is Director of Product Marketing at Zenoss. She transitioned from hardware to software engineering mid-career, and spent the last decade delivering SaaS applications that processed the fastest-growing portion of her customers' revenues. Jennifer enjoys talking to anyone who takes information, adds technology, and produces valuable stuff.