

5

IT Questions Your CEO Could Ask You Tomorrow



DO YOU KNOW THE
RIGHT RESPONSE?

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Own IT.

A Zenoss eBook
By Deepak Kanwar & Jennifer Darrouzet

Prepare Yourself to Answer IT Questions Like These in a Pinch

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Lost in Translation

If your IT department is considered a cost center (as opposed to a strategic area for investment), keep that résumé updated — because someone in upper management is failing you. If you think the situation is salvageable, that you have the tenacity to sink your teeth in and play the role model, and actually do something about it, then this eBook is for you.

Most IT professionals translate human requirements into machine instructions daily. But the strategic importance of what you do is far too often under-communicated, and at its heart, that's a "lost in translation" problem. If you are to influence your leadership team (and start looking like someone who belongs on that team) you must get good at communicating at the macro level as well as at the micro level. The secret to this is approaching your work as **IT Service Management**.



If an executive were to pounce on you in the break room ...

Faced with an unexpected executive interaction, could you converse in a way that would represent your team's business value? Could you translate your efforts – automatically and “on the fly” – into business speak? Or would you wind up spouting technical acronyms or blaming gear or code that no business suit would ever encounter?

You don't need an MBA to represent the strategic value of what IT does for your organization. Here, you'll find specific examples of IT organizations in several industries that have defined the product of their work as IT services. Your executive leadership may or may not have already begun thinking of **IT as a Service (ITaaS)**, or thinking in terms of **IT Service Management**. Regardless of their thinking, your IT team can approach your work and describe your output this way. You'll come across as more knowledgeable and aligned with other departments. And more strategic when communicating with the C-suite.

...would you come across as being in tune with the business... or deep in the weeds?



THE AIRLINE INDUSTRY

Airlines are a unique business - they are highly commoditized, highly regulated, and run on very high fixed cost assets: airplanes. Every minute spent on the ground is a minute with mounting amortization bills and no revenue.

INDUSTRY KEY CHARACTERISTICS



Revenue:

Seats of different service classes



Selection Criteria:

Price, convenience, perks



Key Risks:

Unsold seats, safety, fuel prices



Winning:

Business travelers bring repeat (full-fare) business

Example IT Services of Industry – Support Revenue and Minimize Costs

When **Website Booking** (Airline Reservation Systems or ARS) is working correctly, the airline sits back and lets customers make their reservations. When it's not, the airline can lose \$40K+ per hour in bookings (see next page), plus customer service costs go up.



When **Boarding** (Departure Control Systems) are working correctly, customers proceed from gate seating to aircraft seating in an efficient manner. When issues arise, the boarding experience includes long lines—and often delayed or canceled flights, costing \$40K+ each.



Calculating the Value of IT Services

Flight delays are serious business

According to a study published by the University of California at Berkeley, in 2007 alone, flight delays cost \$29 billion dollars—of which \$8 billion came from airline costs, \$3.9 billion from lost demand, and another \$16.9 billion from costs incurred by passengers. No wonder then that flight problems (delays, cancellations etc.), baggage problems, and reservations/ticketing were the top 3 types of complaints received by the FAA.

Cost of downtime

Given its high fixed costs, downtime for an airline is extremely expensive. Here are a couple of examples:

WEBSITE BOOKING

If an airline makes \$8 billion in annual revenue from self-service website bookings, then this service is worth over \$915K per hour. If an hour-long outage results in just 5% of frustrated ticket buyers taking their business elsewhere, then the outage flushed over \$45K in potential sales. **Loss of 5% = \$915,750*5% = \$45,787 in lost revenue.**

FLIGHT CANCELATION

If 125 seats were sold (about 75% capacity of a 737-800), and the average ticket price was \$350 per seat, **a flight cancelation costs the airline \$43,750.**



SCENARIO: **Website Booking is Down**

WHAT THE CUSTOMER EXPECTS:

I'll book the sales meeting flights now, so I can get the 3:30 return & still make Sarah's birthday party Friday night.

WHAT THE CUSTOMER EXPERIENCES:

I wasted 10 minutes finding the flights & filling in the forms, only to have the site hang on me. It did the same thing twice. I'll have to book elsewhere.

WHAT THE CUSTOMER THINKS:

They can't keep their systems working. I'm booking elsewhere—this time and ongoing.





SCENARIO: Website Booking is Down

CEO:

You're in IT, right? I'm hearing Website Booking is down. Do you know what's going on?



IT PRO, CHOOSE YOUR RESPONSE WISELY...

Classic IT Response: component-focused, entirely tactical

All I know is it's not the network. Everybody started getting alerts this morning, and the whole network team is checking all the switches and routers. Nothing else is down; nobody else is seeing network issues today.

THINK: his question is a cry for reassurance about this IT service

Components and systems are irrelevant to him. What he needs to know is that we are aware of the issue, we're figuring it out, and we know how to make the right decisions so that this critical service can be restored. Because we have tools to track the real-time relationships between various systems and services, we could immediately track the problem to an abnormal finance workload accessing the production bookings database. If we hadn't known who'd be impacted, all parties would have seen slow service during troubleshooting. Instead, the more business-critical service won – quickly.*

Better IT Response: service-focused, more strategic

The outage was caused by abnormal financial reporting that hit the bookings database. We shut the reporting down within minutes in order to restore normal service to our online customers. We'll work with the finance team to get them the data they need without impacting production systems in future.

*See how a real-time service model that spans physical, virtual, and cloud resources can save time in a crisis at zenoss.com/solution/service_impact.



SCENARIO: Boarding is taking 10x longer than usual

WHAT THE CUSTOMER EXPECTS:

One more 2-hour flight and I get to see my kids.

WHAT THE CUSTOMER EXPERIENCES:

They called my group 30 minutes ago and I still haven't boarded the plane.

WHAT THE CUSTOMER THINKS:

These gate agents are incompetent. Or the airline cut staff to save a buck, so customer service suffers. I'll be late again!!!





SCENARIO: Boarding is taking 10x longer than usual

CEO:

It's taking an extra 40 minutes to board a 125-seat plane. We've already had a flight canceled. When is this going to be under control??



IT PRO, CHOOSE YOUR RESPONSE WISELY...

Classic IT Response: component-focused, entirely tactical

We've got route flapping in the DRS. We're all working on it and I need to get back. We'll let you know ...

THINK: his question is a cry for reassurance about this IT service

Recalling that network gear is irrelevant to him, I'll keep this all about service restoration. Because our IT teams can see the holistic view of everything in our unified monitoring tool, it became clear quickly that it was a DOS attack. Security identified the affected routers & we have engaged our upstream provider in filtering the attack. Latency won't be zero, but we've withstood the hackers today.*

Better IT Response: service-focused, more strategic

We were hit by a Denial of Service attack, but boarding services should vastly improve within 15 minutes. Normal speeds will be restored in about twice that, after overtaking latency & a backlog. Security did a great job isolating the issue, and we've engaged the proper escalation steps with our providers, who are filtering the attacks now.

* Disparate tools are very difficult to correlate—manually—during a crisis. Learn results of the Forrester study: [Using Too Many Tools Hinders IT Operations](#)



FINANCIAL SERVICES FIRM

Of the industries we profile, financial firms likely have the most unpredictable demand. 100,000+ equities trade hands every second, each is a revenue-generating event for the trading company.

INDUSTRY KEY CHARACTERISTICS



Revenue:

Stock & option trades, loans, arbitrage



Selection Criteria:

Relationship, price, reputation



Key Risks:

Availability, security



Winning:

Customers bring repeat business

Example IT Services of Industry – Support Revenue and Minimize Costs

Financial Services firms jump through hoops for **Institutional Traders**, whose online trading capabilities can account for 80% of these firms' revenues. Sometimes, however, the same attention is not paid to capabilities provided individual investors. But given that thousands of trades are completed each hour through the **Individual Trading** portal at ~\$10 per transaction, the impact of downtime can quickly add up.

TRADE REQUESTED → STOCK PURCHASED → CONFIRMATION RECEIVED → COMMISSION EARNED

SERVICE DELIVERY

REVENUE



SCENARIO: Individual Trading is Experiencing Intermittent Glitches

WHAT THE CUSTOMER EXPECTS:

Houdini Holdings has just announced its intent to purchase The Invisibles at a 30% premium on its trading price of 34? I want 2,000 shares of that!

WHAT THE CUSTOMER EXPERIENCES:

The dreaded error "Your transaction did not go through; please resubmit." The moment passes and I'm NOT \$20K richer.

WHAT THE CUSTOMER THINKS:

Now I Will Dial Customer Service





SCENARIO: Individual Trading is Experiencing Intermittent Glitches

CEO:

The 800 line's on fire again. What happened??



IT PRO, CHOOSE YOUR RESPONSE WISELY...

Classic IT Response: component-focused, entirely tactical

Yeah, well IT Ops knew we had a bad hard disk but never bothered to fix it. I'm sure heads will roll, but the root issue is everybody is overcommitted, and stuff is going to fall through the cracks.

THINK: his question is a cry for reassurance about this IT service

We've probably lost \$10-20K today, and some individual customers likely lost more. The team did the right thing in moving resources to support the Institutional client, and Individuals wouldn't have been impacted if known-bad storage hadn't gotten back in circulation. We need our CMDB in sync with how we monitor, so we'll get alerted before a service is impacted.*

Better IT Response: service-focused, more strategic

We're on it and normal service should be back within the hour. The team was trying to meet the compressed schedule for the launch of BigTimeRetirementCo, and had to provide more storage resources than planned. As a consequence, we inadvertently hot-swapped some bad storage over to Individuals. Integrating how we manage and monitor our assets will prevent this kind of thing from happening again

* For a 3-minute sneak peak at such an integration, see

[3 People Who'll Thank You for Integrating ServiceNow with Zenoss](#). We're open & extensible to other CMDBs as well.



HOSPITAL

Hospital systems offer the most comprehensive health care capabilities and as a result spend an enormous amount of money trying to keep pace with the latest technologies. Because of the multitude of regulations that govern them, hospitals spend significant time and resources keeping records and ensuring their safety and privacy.

INDUSTRY KEY CHARACTERISTICS



Revenue:
Patient services



Selection Criteria:
In-network, quality of care, convenience



Key Risks:
Legal, getting paid (insurers, government, individuals)



Winning:
Households bring repeat business

Example IT Services of Industry – Support Revenue and Minimize Costs

When **Admitting** is working correctly, patients’ healthcare is delivered quickly and accurately. When it’s not, hospitals can lose an entire household’s business, with an estimated lifetime value of \$1.5M*.

* [The True Cost of Alienating Patients](#)





SCENARIO: The Computers Were Down When a Patient Got Admitted

WHAT THE CUSTOMER EXPECTS:

I've got sharp pains in my abdomen ... I'd better go to the ER down the street. They know us & always take good care of us.

WHAT THE CUSTOMER EXPERIENCES:

I got great care & I'm all better, but you won't believe what happened. Their computers were down and they messed up my paperwork, combining my file with that of another woman with a similar name! They were trying to wheel me into neck surgery!

WHAT THE CUSTOMER THINKS:

What if they'd knocked me out and removed my thyroid??!! I'll never be able to trust them with my family's healthcare again.





SCENARIO: The Computers Were Down When a Patient Got Admitted

CEO:

How could this have happened?



IT PRO, CHOOSE YOUR RESPONSE WISELY...

Classic IT Response: component-focused, entirely tactical

Look, we couldn't afford the gear we wanted, so we got the cheap stuff. So a core switch failed, and the old back-ups were never designed for the throughput we expect now. It's no excuse for data quality issues, though; that's just people being careless with entering the backlog after it comes back up. They don't like staying late... like my team does all the time.

THINK: his question is a cry for reassurance about this IT service

I will not name devices. I will not name names. It's about the business-critical service, and the risk of injury or loss of life for our patients. Each household we serve funds this organization to the tune of \$1.5 million in a lifetime, and it's time we ran this critical service in an HA environment.*


Better IT Response: service-focused, more strategic

Automating admissions with barcodes and bracelets is the only viable solution that's both efficient & accurate. We're simply not staffed for data entry anymore. This community & this hospital would be well-served if we invest in a High Availability (redundant) IT environment, so that error-prone workarounds can be avoided. Patients must be confident in the quality of their care.


* [Patent-pending policy-gates](#) let staff specify what % of resources must be healthy; Service Impact events are generated if your risk threshold is exceeded.

IT is everywhere in the modern college, with network authentication, remote learning, magnetic meal cards, homework submission portals, online libraries, and more.

INDUSTRY KEY CHARACTERISTICS

 **Revenue:**
Parents, grants, students

 **Selection Criteria:**
Reputation, cost

 **Key Risks:**
Budget cuts, safety/security issues

 **Winning:**
Alumni succeed, & give back

Example IT Service of Industry – Support Revenue and Minimize Costs

Online Course Registration is a win-win situation for institutions and students. Thousands of students can view the available classes and register at their convenience and colleges do not have to staff for this function. However, when it is not working, it can result in chaos & confusion amongst students and parents and need for temporary staffing for the college administrators.



SCENARIO: **OnlineCourse Registration is Down**

WHAT THE CUSTOMER EXPECTS:

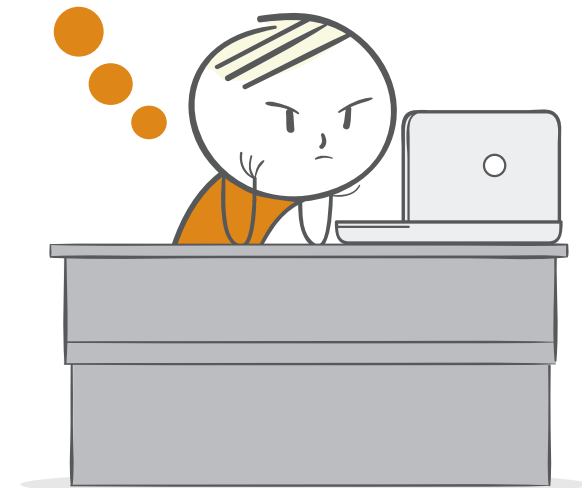
6 more classes and I am graduating. I'll pop online and get the courses before dinner with Mom.

WHAT THE CUSTOMER EXPERIENCES:

The course catalog is down. Twitter's full of flame, and videos of giant long lines wrapping the registrar's office.

WHAT THE CUSTOMER THINKS:

What do I do? If I can't get these courses, that means another semester—at least \$10K more. Mom & Dad will kill me! This school is the worst!



SCENARIO: Online Course Registration is Down

PRESENT:

And this won't happen again... why?



IT PRO, CHOOSE YOUR RESPONSE WISELY...

Classic IT Response: component-focused, entirely tactical

I wanted to add memory to the ESX host where the course registration VMs were running last month. This won't happen again because I'll help people remember this disaster during the next budget cut cycle.

THINK: his question is a cry for reassurance about this IT service

Budget cuts meant we didn't have extra RAM laying around, so we cut it too close. Then we didn't want to make changes we weren't SURE we'd need during the registration environment freeze. We need flexible capacity we can pay for only when we need it.*

Better IT Response: service-focused, more strategic

I'll be recommending a flexible cloud "burst" design so this won't happen again. We'd be able to allocate resources as-needed, matching to seasonal demand without having to maintain (and pay for) excess capacity all year long.

* Zenoss loves hybrid environments of physical, virtual, and private/public clouds. [Grab 3 steps to automating load-based elasticity with AWS and Zenoss here.](#)

Get to a Better Response Faster with Zenoss

Now, if you read this eBook thinking to yourself “sure, Zenoss, it’s a lot easier to sound like you know what you’re doing ONCE YOU KNOW WHAT WENT WRONG—everyone sounds like they’re scrambling before that,” you’re certainly not alone. But that’s also part of our point. If your first step to root cause identification is figuring out who has to figure out what went wrong, and then precious hours go by while the unlucky parties manually correlate tremendous volumes of data, coming at you fast from a variety of sources, that’s no IT Service Management. That’s monitoring components of your infrastructure, and relying on tribal knowledge. That approach to what is essentially a Big Data problem is one that lengthens the time between an incident and a coherent response to the CEO’s question about service disruption. That’s a problem Zenoss can help you solve.

If you can see the value in approaching everything you do from an IT Service Management mindset, consider Zenoss, a unified monitoring solution. Zenoss maps services in real-time to their underlying components, and translates every hiccup into knowledge about your services. You can have Zenoss keep quiet about any component until or unless it puts a service at risk, or until it sees a service performing poorly, or sees a service fall over. It will keep you in tune with your organization’s goals. So you’ll always be ready when executives pounce.

Conclusion

Executive communications can be like hockey. You get one chance to label the puck with your viewpoint, and—once you put it in play—it’s going to move fast as other executives redirect it again and again until it comes to some resolution. How you label the puck in the first place, and the trajectory it’s launched on, can help you score a goal, or not.

You can’t communicate effectively with executives about your IT team’s valuable work without first knowing what your executives value. Start there, understanding the key IT Services that drive revenue and keep costs manageable for the business as a whole. Share this eBook with your team, and hold a lunch-and-learn to get on the same page about YOUR organization’s most important “VIP” services. The pizzas will pay for themselves the next time you experience an issue.

Because if your team can’t understand and communicate with the big picture in mind, there’s a real possibility that you’ll ALWAYS be underfunded and overworked. Conversely, you’ll all look more valuable to the business if any one of you encounters an executive and illustrates IT’s alignment with the goals of your business. Practice the inner monologue we’ve illustrated, where IT staff think about answering a CEO’s questions from a Service Assurance frame of mind. Practice labeling that hockey puck with the name of a “VIP” service, NOT the name of some component in the data center.

Every minute that a service is down is a minute that your organization is losing revenue, or reputation, or both. And it is another minute that your customer spends considering alternative providers. Your organization will be better off when your IT team embraces IT Service Management, and adopts that approach in daily conversations—with executives , and everyone else, too.

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.

[**SIGN UP FOR A FREE TRIAL OF ZENOSS**](#)

About the Authors



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.



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