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Cloud complexity management (CCM): A new year, a new problem

The best way to dealing with IT complexity is not to ignore it, but to embrace and manage it. Here are some basic concepts to consider.

I expect 2019 will be the year when both cloud complexity and cloud complexity management(CCM) starts to emerge. Why 2019? That is the year when workloads on cloud-based systems surpass 25 percent, and when most enterprises are likely to hit the tipping point in terms of dealing with the resulting complexity.

What is occurring now is that enterprises are spending most of their time and money migrating applications and data to the cloud. At the same time this is making the IT infrastructure and platforms more complex considering that the legacy stuff still has to run, and now you have public and private cloud-based systems to deal with as well. What's a CIO to do?

The best path to dealing with IT complexity, which is what this is, is not to ignore it, but to embrace it, and manage it. Here are the basic concepts we'll breakdown in future blogs: **Dealing with the data.** This means taking the 200 or so databases, which expanded to 300 with the use of cloud computing, and looking for common patterns in ways that the data can be better organized. While the data may be stored in different databases, which use different models, with different physical storage, in order to apply CCM you need to consider commonalities with metadata, and actually database elements.

Dealing with the services. Just as people deal with databases we need to deal with services, or APIs, as well. This means tracking the services, and also looking for commonality that will be important when going to your next step, creating abstractions.

Creating abstractions. This is the process of taking what you've done in the previous steps, and creating abstractions which should simplify both data and

services. For instance, the ability to take all of the employee data existing in 12 different databases and being able to address those databases and data as a single logical representation of the data, this being no matter if the data exists in the cloud or not.

The complexity crisis is upon us, but I doubt that most know it's coming, let alone understand the issues, and ways to fix them. That is why I am attempting to be proactive here.

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