

IT CAPACITY MANAGEMENT & PLANNING



When you practice capacity management in your digital enterprise, you are quite literally managing the capacity requirements of the infrastructure so it performs at peak performance, using the fewest resources most efficiently.

The process of capacity management, however, is robust. It includes planning, managing and optimizing the IT infrastructure that makes up the framework of your business. For businesses who handle the process internally, it requires extra resources, time and dedication to the tasks.

Thinking of tackling capacity management, and by design, capacity planning in-house? If so, BMC has answers on how to do it effectively. Keep reading to learn more.

What is Capacity Management?

Capacity Management is a process that seeks to meet business demands via an approach that ensures infrastructure is the right size to meet present and future goals. It's often associated with [the ITIL framework](#) that describes a commonly used approach to capacity management.

As a digital organization grows and evolves, so does its need for processing power, namely central processing units (CPUs), memory and storage as it relates to a physical server. With a process for establishing current and future needs, capacity planning can take place.

What is Capacity Planning?

Capacity planning defines the process by which an organization can establish current and future processing needs. The important thing about capacity planning is that infrastructure is flexible to meet changing demands.

Capacity planning is part of the overall capacity management cycle. As stated at the top of this blog, capacity management includes planning activities, management activities, and optimization.

Planning is a prominent piece of the capacity management puzzle. So much so, capacity planning is sometimes used synonymously with capacity management. Like a lot of things in IT, the line for where one ends and the other begins depends on your organization, infrastructure framework, resources and preferences.

Capacity Management vs Capacity Planning

Capacity management and capacity planning are similar but different. It's easy to want to use the words synonymously since, at their core, they are both parts of an overarching strategy seeking to solve the same problem: *how can a business ensure they operate efficiently enough to always have the capacity to meet evolving demands?*

According to Mike Wise, author at [Microsoft DataDriven blog](#), one big difference that sets apart capacity planning from capacity management is that capacity planning has a "throwaway" quality. That is to say, that capacity planning is something that is done upfront. It is the needs intake and assessment, but capacity management is the entire lifecycle of monitoring, collecting data, analyzing data, optimizing infrastructure, and landing back on monitoring again.

Digital businesses seeking to implement a successful capacity planning and management strategy in their business would do better to not use the words synonymously and to think of them as the distinctly different entities they are. Capacity management is an ongoing performance-enhancing lifecycle, while capacity planning is an initial activity, but that also doesn't mean you should just drop it in as needed to buffer expected growth.

In the next section, we'll look at best practices for capacity management that include continuous planning.

Capacity Management Best Practices

Since we know capacity management includes a robust network of rotating processes, any digital entity looking to go it alone should be comfortable with some basic best practices. These are as follows:

Continuous Planning

Continuous planning is an agile approach to capacity management that ensures instead of planning on an annual, bi-annual or otherwise scheduled basis, that organizations are continuously planning for changes.

The benefit of continuous planning offers more visibility into capabilities and available resources, allowing businesses to meet new demands on the fly instead of waiting for the next scheduled

planning session to increase productivity.

With the visibility gained through continuous planning, digital enterprises can prioritize tasks accordingly and operate more efficiently. This gives businesses an edge over the competition and a better end-user experience.

Workload Scenarios

Running workload scenarios and testing the capacity demands is a sure-fire way to ensure you can meet a number of capacity challenges that new work throws at you. IT professionals should get comfortable with running a lot of what-ifs throughout the capacity management process.

What if workload scenarios include questions like:

- What will my system needs look like in X months with X percent of growth?
- What will my system needs look like at peak hours?
- What will my system needs look like at peak times of the year?
- What will my system needs look like if I gain a client as big as my largest client?
- What will my system needs look like if I lose client X?

It's important to tailor these questions in the planning process to meet the unique qualities and specifications of your business.

Workload Analytics

In addition to coming up with scenarios about future workloads, it's also important to examine how your current workloads function and how efficient they are at present and at peak times. This is called workload analytics.

The internal IT process should include examining questions about why existing workloads change and what happens when they do. After identifying current trends you can apply the same mechanics to growth projections to determine your needs for future workloads.

Reporting, Insights & Accuracy

When planning for capacity, whether coming up with workload scenarios like the ones above or just plotting out what resources you will need to hit all target growth projections, it's important to have accurate reporting from which you can gain insight.

After all, if all of your projections are based on the wrong numbers, or all of your what-if scenarios contain bad information, they won't return accurate results to ensure efficient use of resources and accurate planning for new ones. That's one reason capacity management and ITIL go hand and hand, because ITIL outlines data lifecycle processes, as well, that can ensure digital businesses are using the correct data to program their infrastructure.

These best practices lay the groundwork for a strong foundation on which to perform capacity management and planning. Without these basic processes in place, it would be difficult to get a good idea of present and future needs.

Dynamic Capacity Optimization

It's very clear that capacity management and capacity planning are complex. Hopefully, you found this introduction an informative primer.

But if you're a company looking into doing it yourself, be prepared to roll your sleeves up. There's a lot more to capacity management than it initially seems and doing it right requires dedicated resources.

BMC is one such resource that can assist you with all of your capacity planning and management needs.

BMC uses **dynamic capacity optimization**, a process by which automation is leveraged to manage existing infrastructure, like making real-time adjustments to virtual environments. With a variety of environments that companies use to stay competitive in a global economy, it's important automation be able to support multi-cloud and hybrid cloud environments.

When you partner with BMC, we will work with you to automate capacity management in your existing infrastructure. To learn more about how BMC can help you, [contact us today](#).