

Optimized Capacity Management Drives Business and IT Success at Sanofi

How a leading global pharmaceutical company designed a capacity management practice for more agile, efficient operations

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Executive Summary

As a global leader in the pharmaceutical market, Sanofi must support sustainable innovation and growth throughout its large organization. Sanofi IT and business services must perform reliably and consistently even as the number of users expands and new demands are placed on the underlying infrastructure.

Sanofi needed a consistent, repeatable way to model and monitor the impact of current and planned services and utilization trends, which required adding a comprehensive capacity management solution and practice to their existing performance monitoring efforts.

This paper describes how capacity management enabled Sanofi to prepare effectively for shifting business demands and avoid the kind of bottlenecks that can degrade service.

Furthermore, the successful partnership that developed between IT and the business continues to help Sanofi deliver powerful results, such as:

- Capturing new market opportunities
- Expanding the company's global footprint
- Bringing innovative products to market



THE IMPERATIVES FOR IT TO DRIVE BUSINESS TRANSFORMATION AT SANOFI

IT plays a strategic role at Sanofi, one of the world's largest pharmaceutical companies to develop, manufacture, and sell prescription and over-the-counter treatments. To maintain its leadership and impact in the global healthcare market, Sanofi must maintain a high level of business agility, with the business and IT organizations working together to address these key business objectives:



1. Support business growth

Sanofi is the number one pharmaceutical company serving emerging countries, which represents 80 percent of the world's population. Sanofi continually strives to expand its area of operations and reach new customers. At the same time, the company works to enter new product segments within its existing market footprint, such as consumer healthcare and treatments for unmet medical needs.



2. Increase innovation

Continual innovation is especially critical in the pharmaceutical industry, where successful products can drive profitability for only a limited time before their patents expire and lower cost, generic alternatives come on the market. Sanofi's R&D organization must have the tools, procedures, and capabilities to create new revenue streams, including a shift in emphasis from blockbuster drugs to more narrowly targeted biotech and biologic treatments, healthcare solutions beyond medicines, and other ways to improve patient lives.



3. Enable continuous improvement

To play its role as a valued partner to the business, IT must ensure optimal alignment of people, processes, and tools to meet the expectations of internal customers. IT must transform systems, establish and maintain standards, set and meet aggressive SLAs, monitor KPIs, promote best practices, deliver new and better services, increase visibility and cost transparency, and ensure that IT is always ready to drive optimal value for the business.

THE ESSENTIALS: PEOPLE, PROCESS, AND TECHNOLOGY

Sanofi realized that regardless of their business challenge, increasing IT speed and agility was an essential part of their IT transformation. Without focused efforts by IT around standardization and integration, their growth could result in a patchwork of heterogeneous tools and procedures. To help its business units operate more effectively as an integrated organization, IT launched three projects in tandem:

1. Process harmonization

Sanofi IT pursued a strategy to define logical processes and identify solution owners on a global basis as a foundation for more standardized operations. This included the development of next-generation data centers (NGDCs) with consistent systems and configurations in each of its regions.

2. Standardization

To implement these newly defined processes, Sanofi created a working team that had a designated person responsible for each process and the sourcing of related technologies. This team ensured standardization, including the configuration of racks in each NGDC, the technologies provided, and the tool sets used for Level 1 and Level 2 support.

3. Services optimization

Technical solution owners worked with teams in a consultative role and established standards and best practices for regional teams to implement and support in consistent ways within their NGDCs.

Sanofi discovered that holistic IT capacity management was a crucial element of its strategy to provide the right people with the right processes and the right tools. For each of the services it defined—from servers and network protocols to user applications—the solution owner needed clear visibility into availability, performance, and capacity. Technologies from newly acquired companies also had to be integrated and standardized quickly and seamlessly.

ENABLING GLOBAL CAPACITY MANAGEMENT

To maintain optimal performance and availability for current and future services, IT realized they needed to have full visibility into utilization trends and their impact on the systems that power them. Traditionally, capacity planning had been performed using manual methods such as spreadsheets and ad hoc reports—a highly labor-intensive, often error-prone process that lacked the visibility and timeliness needed.

Sanofi IT realized they needed a better solution with the following capabilities:

- A holistic enterprise-wide view of the infrastructure, including physical, virtual, and hybrid cloud
- Ability to plan, manage, and view infrastructure resources by application and business unit
- Ability to automate the data collection as well as analyze and report on infrastructure utilization
- Integration with IT service management tools to facilitate a business service management architecture

To address these needs, Sanofi selected TrueSight Capacity Optimization (TSCO), which satisfied all of their needs by offering clear, accurate visibility into current utilization and capacity thresholds without the need for ongoing manual work. However, Sanofi realized they needed more than just a tool to be successful—they needed an insightful capacity management practice that was fully integrated with their use of TSCO and their business.

IMPLEMENTING A CAPACITY MANAGEMENT PRACTICE

Sanofi worked with Moviri, a BMC solutions preferred consulting and technology alliance premier partner, to define and deploy a capacity management practice using a four-step process.

1. Define a blueprint

The implementation began with defining the processes for the project, including who would hold decision-making authority in various areas and how the team would communicate internally and with stakeholders. The team defined KPIs, intended benefits, and the metrics most relevant for ensuring they had the resources from IT to continuously support the business as workloads and needs changed. This information was used to determine which components of the IT infrastructure were to become part of the capacity management process and which data sources were most important for analyzing and modeling IT resource and capacity needs.

2. Collect data

A crucial step was the standardization of data sources to ensure a robust, controllable, and manageable process to collect data for capacity management. Taking advantage of TSCO's flexibility in extraction scheduling, the team defined a data integration approach designed to avoid interfering with ongoing customer-facing business processes.

Reflective of the nature of its global IT department, the data sources chosen for Sanofi's capacity management implementation included:

- ESX servers powering Sanofi's highly virtualized environment
- HP® virtualization environment
- Oracle® databases, clusters, and servers
- EMC®, Dell®, and NetApp® storage farms
- Network devices capacity, port configurations, availability, and bandwidth utilization
- Other business drivers and technology metrics

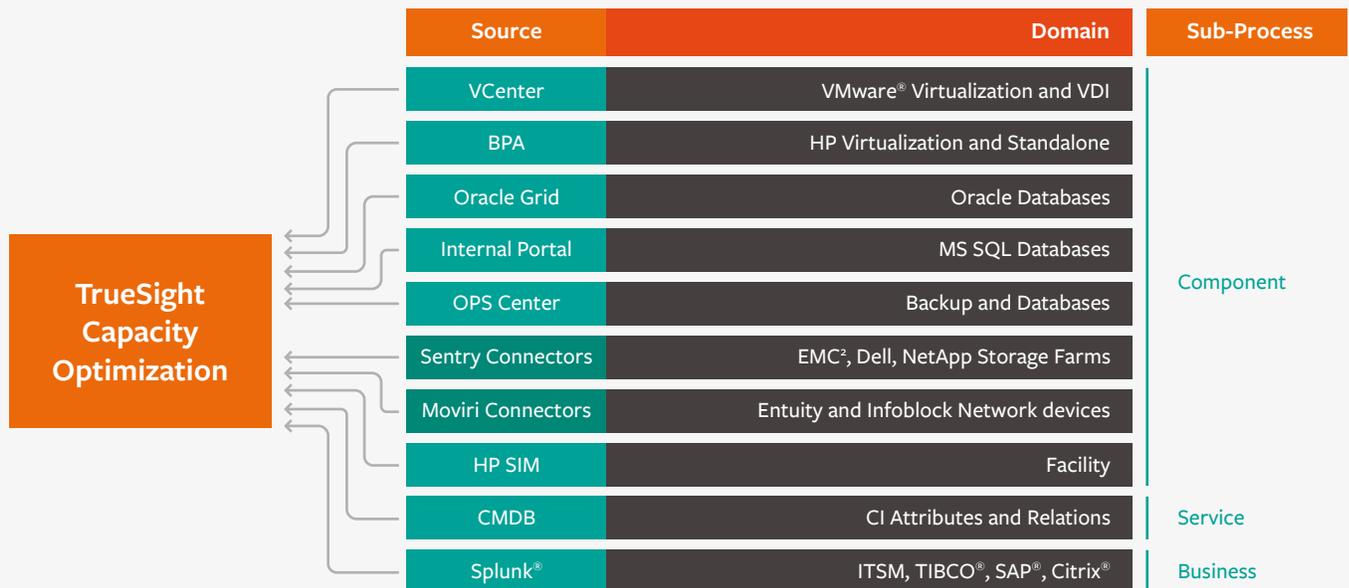


FIGURE 1: Data Collected for Capacity Analysis

3. Transform data into information

Based on the work in the first two stages, the team set up the necessary automation to populate TSCO with data and focus on high value activities such as analyzing, modeling, and reporting. Dashboards were created with these goals:

- **Provide visibility** – A foundational step for a capacity management practice, which represents the majority of the internal requests by stakeholders
- **Mitigate risks** – Analysis to avoid the risk of not having enough capacity or not having it in time
- **Reduce costs** – Analysis to avoid having excess capacity over time or allocated too early in the process

4. Optimize

With TSCO, the team was able to measure the effectiveness of the approaches defined during its planning stages. Building on this starting point, the team worked for continual service improvement, guided by ITIL® best practices for service management, and created two groups of automated reports:

- **Internal reports** – Provide information on the operational quality of the data collection process, show the current level of service, and highlight any exception that requires manual intervention
- **External reports** – Provide current utilization of capacity, potential opportunities for reclaim, and estimated dates of saturation of available capacity for each area under management

RESULTS

Sanofi has been able to implement a consistent process for capacity planning and management across all of its global data centers. IT has clear visibility into the resources supporting each service and the impact of utilization trends, user growth, and the introduction of new services on performance and availability. Automated reports are emailed to stakeholders, which support monthly capacity management meetings, while dashboards provide both at-a-glance and drill-down detail for ongoing monitoring and analysis. Planning helps Sanofi maintain seamless alignment between business and IT to deliver optimal service with high efficiency.

The correlation of IT metrics with business KPIs enables Sanofi to identify correlations between business volume and IT consumption to anticipate when and where an increase in users might strain available resources. IT can easily see how many users are currently supported on a given solution, and how many more can be added before a specified threshold is reached. This enables IT to have informed conversations with business groups about resource allocation. Example situations include anticipating whether additional capacity will be needed to support the surge following a planned marketing campaign or identifying resources that are currently overprovisioned for services that are unlikely to ever reach current thresholds. Conversely, business-aware capacity reporting also helps IT understand where correlations don't exist between business volume and IT consumption, which helps guide investments to areas of greatest business value.

As a standardized, repeatable process, capacity planning and management with TSCO helps Sanofi achieve its goals of process harmonization and service optimization across all of its data centers worldwide. The company can grow its reach and deliver the new services needed to drive innovation with full assurance that its technology environment can meet the demands of its dynamic business requirements.

LESSONS LEARNED

The Sanofi team realized that one of the most important aspects of a good capacity management practice is the ability to share the valuable information that is an outcome of the analysis done on resource utilization and needs.

1. Leverage skills and expertise from technology owners

Sanofi and Moviri emphasized partnership between the capacity management team and technology owners beginning with the assessment phase. These discussions helped the capacity management team gain insight into utilization trends, situations to be avoided, what kinds of reports would be most useful, which data sources to connect, and other factors for an efficient TSCO design and implementation.

2. Assess data quality

The team assessed the repositories of the existing performance monitoring tools in place to ensure that their data was a good fit for the project. This included an understanding of potential integration points to discover the most sustainable approach.

3. Focus on value to the business

To prove the value of TSCO and capacity management to the organization and gain support for further efforts, the team turned first to the company's most expensive and critical systems. The success shown in maintaining performance and availability for these critical core systems paved the way for continued work in other silos.



FOR MORE INFORMATION

To learn about how TrueSight Capacity Optimization can improve your business, please visit bmc.com/capacity

ABOUT THE AUTHOR

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