HPE Data Center Strategy and Roadmap Services

By HPE Pointnext Services

Data center transformation, consolidation, and migration projects often stretch Customer IT operations teams. Most of the time, the team's skillset and procedures cannot cope with the amount and nature of the changes in the physical environment. The enterprise's IT transformation road map would provide insight to validate the future state IT requirement that will lay the foundation for the data center strategy and meet business objectives.

HPE Data Center Strategy and Roadmap Services is designed to assist Customers in rationalizing the current state of their data center infrastructure condition as well as IT, facility, business, and risk requirements. By considering the combined requirements, the service allows the Customer to determine a future state that considers all feasible sourcing options along with a financial total cost of ownership comparison and helps devise a data center strategy focused on innovation and the transformation process.

Service benefits

- The service provides a right-sized, practical, and relevant data center strategy that outlines current data center lifecycles, the suitability of your current data centers to fit into the future state framework, and multiple future state options. It gives you a 10-year growth profile based on your IT growth projections.
- We deliver final reports within weeks, complete with a recommended future state data center framework, model/topology, number of sites, sizes of facilities, distances between the sites, and more. This helps you implement faster and save on the costs involved in running and maintaining your data centers.
- The service employs a highly structured delivery framework with accurate, repeatable delivery toolsets and processes.
- It completely integrates your business, risks (if any), technology, and data center facilities requirements.
- It provides a snapshot of your current data centers and helps predict how much longer your data centers can remain functional, what you can do to use them for as long as possible, and the way forward.
- It gives you a practical and right-sized future-state data center road map.

The engagement is typically divided into three core tracks and is spread across a schedule of 12 to 16 weeks.

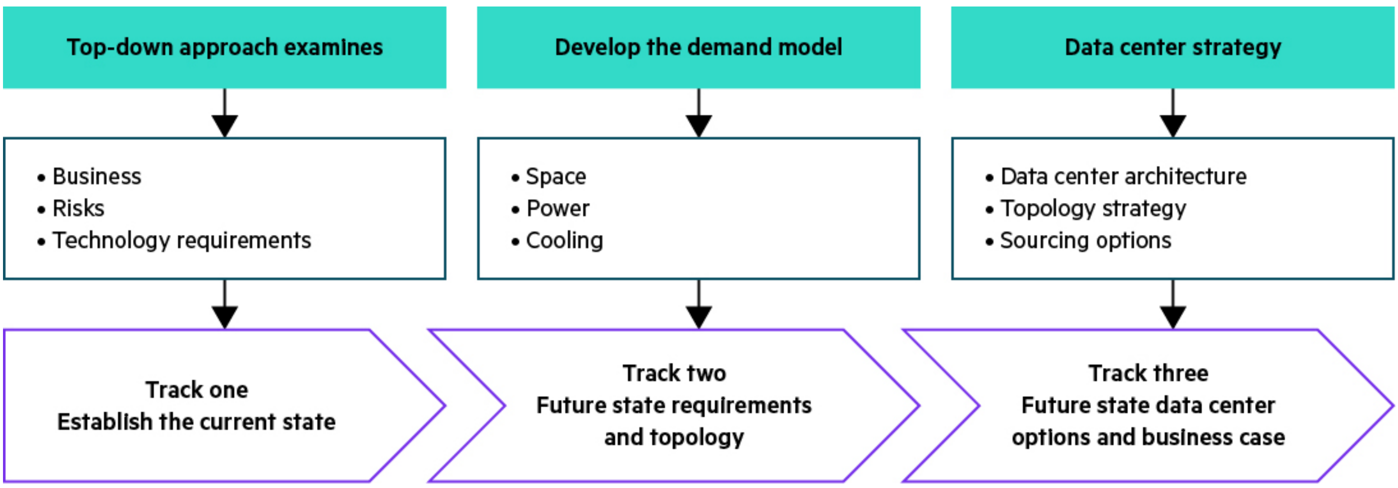

Figure 1. Typical engagement model in tracks

Track one—Begins with understanding business objectives and vision, ascertaining the risk and technology profile, and developing a gap analysis from current capacity and utilization states. The main outcome of this track would be an established current state baseline view of IT and facilities. HPE consultants would:

- Review the business model, strategies, drivers, and plans
- Review the risks profile including business impact analysis, disaster recovery planning, and business continuity planning (BCP)
- Review the current state of IT frameworks, environments, strategies, plans, and instances—The state of the existing data center model/topology, framework, and facilities environment
- Put together a complete technology growth profile
- Conduct a gap analysis of the current data center model/topology, framework, and facilities to determine their suitability as a part of the future state data center framework

Track two—Sets the main objective to develop the future demand model in terms of space, power, and cooling. From this, the future data center topology, and the required resiliency for each data center facility under consideration can be established.

- We develop the future state data center strategy, plans, and road map based on your business objectives, risks, IT strategies/plans, and technology growth profile.

Track three—Creates the transformational plan with reviews on sourcing options, operating models, and transformation strategy. Typically, this also includes building financial scenario modeling and business case development. Finally, we deliver a comprehensive and detailed data center road map report, as well as an executive presentation.

Service feature highlights

HPE Data Center Strategy and Roadmap Services helps Customers with assessing their IT strategy and devise a data center strategy focused on innovation and the transformation process. The services help to understand the current state IT footprint baselines and develop a future forecast of the IT infrastructure through translating the IT infrastructure requirements into facility space, rack organization, data center topology, facility resiliency, and power/cooling demands based on agreed principles. Finally, the service can help to develop a cost model to analyze the various scenarios that can help determine the right path for the Customer's data center journey.

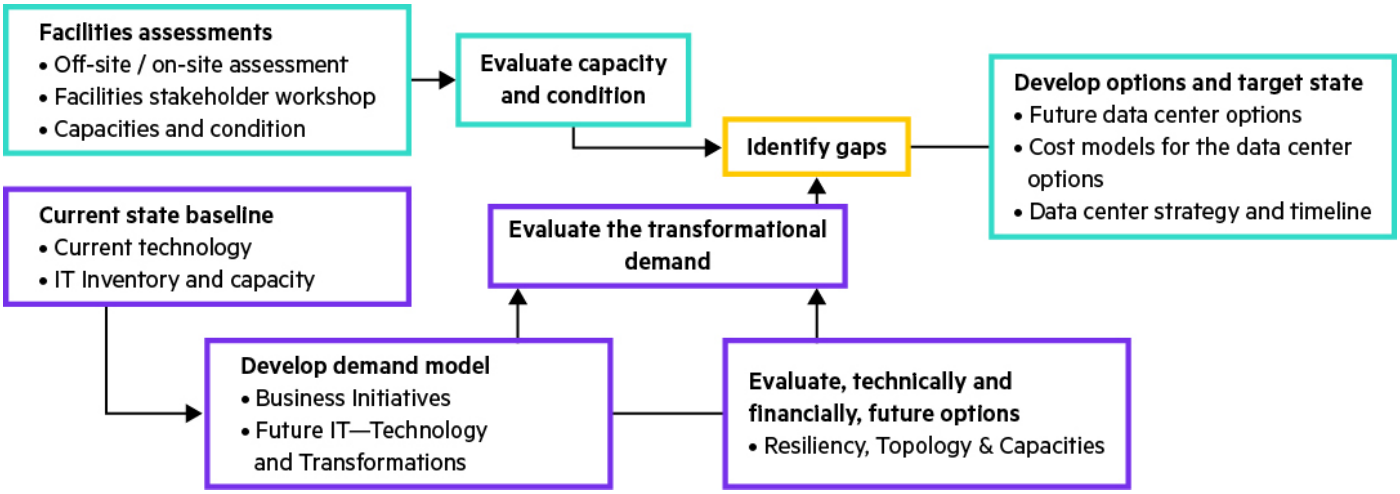

Figure 2. HPE Datacenter Roadmap service to analyze your current state and plan the future

It involves several steps:

- Service planning
- Discovery workshops
- Current state baseline
- Develop a demand model
- Future state strategy options
- Executive presentation

Table 1. Service features

Feature	Delivery specifications
Service planning	An HPE service specialist plans the necessary activities, including the identification of any prerequisites, and schedules the delivery of the service at a time mutually agreed upon by HPE and the Customer. This shall be during local HPE standard business hours excluding HPE holidays unless otherwise agreed upon by HPE. Any service provided outside of standard business hours may be subject to additional charges.
Discovery workshops	• Review baseline profiles to include current inventories of IT systems and source data center locations, historical IT systems growth patterns, and IT infrastructure deployment trends • Lead the discovery process for planned and/or desired future workload placement (public cloud, private cloud, bare metal) and its impact on systems, processes, and deployment methodologies • Solicit stakeholder input for future planned and/or desired technology infrastructure, systems, processes, and deployment methodologies • Conduct a high-level review of existing data center facilities to understand their constraints from a capacity and availability perspective
Current state baseline	• HPE develops a summary of understandings from the discovery workshops with various stakeholders from Customers to drive the current state baseline process. • HPE assesses the Customer IT asset inventory and categorizes the technologies as relevant to the services or operations. The technology categories in a simpler version could be servers, mainframes, shared storage, and networks. HPE also gathers the current capacity and utilization from the site visits and facility assessment reports. • HPE reviews the equipment distribution in the racks and across the floor layout for any equipment zones. We develop a high-level understanding of the network topology and the structural cabling practices and understand the cabinet preferences and dimensions. HPE develops a set of considerations and assumptions based on the understanding that is fed into a demand modeling tool that is developed and maintained within HPE. • We would then apply the considerations such as rack-level **U** utilization for specific category racks, developing derated power factor for technology categories, based on the existing configuration and system utilization reports (if any). Develop assumptions on a swing (buffer space and power) to support refreshes and additional growth. • All the assumptions and considerations are fine-tuned to arrive at the current state baseline that would typically reflect the actual capacity and consumption in the data center.
Develop demand model	• Collaboratively develop a technology growth modeling profile outlining data center space and power/cooling projections over a 5- to 10-year period. • HPE and the Customer collaboratively organize modeling parameters into technology categories. • The HPE team works with the Customer stakeholders to determine efficient technology systems criteria for the data center framework. These criteria are then used to develop a comprehensive custom model. The critical inputs for the demand model include the following: • Create a growth profile per category • Offer cabinet considerations (the dimensions and specific models that need to be considered) • Provide derating factor / power diversity factor • Understand the equipment distribution practices and develop assumptions for target state floor layout planning • Determine the rack level space (RU) and power (kW/rack) limiting factors per technology categories • Develop the assumption for the swing space and swing power consideration to support future expansion and refresh programs • Determine floor loading thresholds based on the target data center floor specifications • Determine the cabling topology in support of the network architecture and connectivity (centralized vs. distributed) • Refresh policy that will impact the future demand in time
Future state strategy options	• Develop future data center strategy options based on the topology, resiliency, and business continuity objectives. At this stage, we define the future state options for the data centers using multiple scenarios to support the future state requirements • Collaboratively agree on the strategy options that will be evaluated for cost implications and risk assessment • Develop the cost model for the strategy options considered. The details of this cost model depend on the scope of the project engagement mutually agreed with the Customer stakeholders • Create a risk assessment scorecard by assigning the scores against each of the risk categories for all scenarios compared. We can develop more categories or refine them to suit the Customer objectives and the areas covered for risk assessment. The risk categories and the risk ranking are usually developed in mutual agreement with Customer objectives and guidelines that were assessed during the initial phase of the engagement • Bring together the cost estimation and the risk score for each of the options and develop a comparative overview. The outcome of the total cost of ownership vs. risk could be developed in a similar representation • Document and supplement HPE recommendation with the comparative analysis
Executive presentation	• HPE conducts meetings (on-site or remote), with required Customer stakeholders to present and review the results of the data center strategy and road map

Service limitations

The deliverables are strategic to support business decisions and secure budget approvals in alignment with the Customer's data center road map through short-term to long-term strategy. HPE can provide additional conceptual design criteria and raised floor layouts for data centers that are aligned with Customer IT and network architecture. The HPE team can provide additional detailed technology infrastructure design services that create the required detailed design and construction documents package to create the final design package. This can be utilized for sourcing contractors to build out the entire data center technology infrastructure (such as racks, cabinets, cabling, support systems, equipment rooms, and more). More detailed services would be covered within a separate work effort and statement of work (SOW) contract.

Service eligibility

HPE Data Center Strategy and Roadmap Services is applicable to Customers that

- Want to evaluate/determine their strategy and planned journey of their data centers to meet the Customer's business objectives
- Want to be able to address situations where most of the spending is going into keeping the lights on and who wants to shift that spending to innovation and agility
- Have multiple data centers and want to consolidate
- Want to spend less on maintenance and management and more on innovation and business initiatives
- Are and have been experiencing data center capacity issues to expand or plan the future IT
- Spend too much time on management and maintenance, too little in other areas
- Want to evaluate alternate sourcing options for both IT and facilities
- Are interested in building a next-generation data center
- Want to align IT with the business

Customer responsibilities

- Allow HPE full and unrestricted access to locations where the service is to be performed
- Identify suitable stakeholders to engage with HPE during the proposed workshop to assist in identifying steps needed to relocate IT operations into a hosted collocation facility, identifying the facility and IT planning and operational aspects
- Identify suitable attendees to participate in all required meetings, including the kickoff and issue invites; and facilitate and ensure attendance of all such attendees or their authorized delegates
- Adhere to licensing terms and conditions regarding the use of any HPE service tools used to facilitate the delivery of this service, if applicable
- Provide a suitable work area for delivery of the service, including access to an outside telephone line, power, and any network connections required
- Assign a designated person from the Customer's staff who, on behalf of the Customer, grants all approvals, provides information, and otherwise is available to assist HPE in facilitating the delivery of this service
- Provide an electrician and/or HVAC mechanic to create access to electrical or mechanical equipment, if required by HPE
- Allow HPE to enter and exit the site with a laptop computer, which will be used to collect data and create documentation
- Provide HPE with current IT asset inventory; data center floor layout; IT rack elevations; and electrical, mechanical, and architectural design drawings

Ordering information

Availability of service features and service levels may vary according to local resources and may be restricted to eligible products and geographic locations. To obtain further information or to order the HPE Data Center Strategy and Roadmap Services, contact dcts@hpe.com.

Learn more at

HPE.com/us/en/services/data-center-facilities-services.html

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