Top 10 questions to answer when going hybrid

Hybrid IT brings new wizardry to your infrastructure, giving you the best of all worlds. You can combine the total control of on-premises deployments with the cost-effectiveness of the cloud. Run critical workloads in your own data center. Have other workloads hosted by service providers, or source IT services from the cloud. There’s a world of opportunity to make your IT more versatile than ever. But what are the key points to consider on the journey to Hybrid IT?
Each of the Hybrid IT options has its place, because workload requirements on infrastructure are very different.

But where to place which workload? More and more often, the ideal answer will be to go for a blend of different options. This briefing paper gives answers to the top 10 questions you should ask to find your optimal sourcing strategy.

Top 10 questions

1. Where to place which workload?
2. Which infrastructure products to use on-premises?
3. How to deploy new infrastructures rapidly?
4. Who will manage which infrastructure?
5. Who will host my infrastructure?
6. How to find the best fitting cloud service provider?
7. How to perform cloud migration in the most effective way?
8. How to bring different workload placement options together?
9. How to implement an effective data protection strategy?
10. Who can support me on my Hybrid IT journey?

For more information click here.
Where to place which workload?

There are two dimensions which are decisive when it comes to the question of workload placement – it is the complexity of the workload and the business value it generates. Complex workloads are those which require a high level of customization which have to meet special security, privacy, and compliance demands, for which you want to keep full control, and for which low latency is essential. If they create real value for your business, run them on-premises. If they do not create business value, retire them. Less complex workloads which are needed to create business value should run in the cloud, because the cloud stands for agility and cost-effectiveness. Workloads which are less complex and generate lower business value may be outsourced on price and run off-premises in the data center of a hosting provider. You should seek out a partner that offers a broad range of Hybrid IT consulting services to identify your ideal solution jointly with you by taking a cocreation approach. Only then can you be sure that you will receive unbiased advice without a hidden agenda that pushes you into a direction which is not ideal for you.

Which infrastructure products to use on-premises?

Your vendor of choice should be able to build complete data centers on your premises. He should be able to provide you with a broad range of infrastructure options (server, storage, network, and software products) that fit to the performance and scalability requirements of your workloads. In addition, the vendor should offer intelligent and innovative system management solutions providing all the functions for fail-safe, flexible, and automated 24/7 system operations. Depending on the individual case of on-premises installations, various options can occur. Consulting therefore is key. All products should ideally be supplemented by consistent on-site support services covering all your locations. In order to maximize your investment in software, contain costs, and keep compliance, the vendor should have certifications for the major software vendors in place to help you manage the complex mix of contracts, agreements, and license models across cloud and non-cloud infrastructure. If you want to choose IT financing over cash purchase and ownership, the vendor should be able to offer a complete portfolio of financial solutions enabling the planning, transitioning, acquiring, managing, and retiring of your IT infrastructure.
Who will manage which infrastructures?

Different organizations may have different strategies with regard to infrastructure operation. There are organizations that have the resources, skills, and capabilities to manage their infrastructures on their own, while others don’t have these prerequisites. In this case, make sure you select a managed infrastructure service provider with global reach. The capability to deliver IT services around the world provides you with the assurance that your IT operations receive the attention to service quality, consistency, and security they require, wherever they might be located. Ideally, the operational delivery processes of the managed service provider are ITIL®-compliant, the global data centers are designed and operated to the standards of the Uptime Institute, with secure operations conforming to ISO 27001, as well as to various national government standards.

Who will host my infrastructures?

If you intend to place some of your workloads off-premises, such as those which are less complex and provide only limited business value, you may choose a hosting provider who will make one of its data centers available to you. In this case, it is up to you to decide if you want to manage the respective infrastructure on your own or have it managed by the hosting provider. The hosting provider should incorporate Green IT principles in its data center design to reduce carbon emissions. But most importantly, make sure the hosting provider has implemented sufficient security measures (i.e. biometric scanner technology) that ensure that only personnel with the appropriate credentials have access to your data.

How to deploy new infrastructure rapidly?

Building and managing data center infrastructure is increasingly complex, error-prone, time-consuming, and expensive. Components such as servers, storage, network components, and software need to be selected from a myriad of options, procured and integrated. Extensive tests have to be conducted to guarantee the compatibility of the individual components. This in turn requires a deep knowledge of all components involved and an understanding of their interdependencies on each other. Doing all this on your own can be a viable way, if you have all the experts in place to cover the complete process required to introduce new infrastructure. However, if you don’t have the right skills on board, this presents your business with multiple risks. To mitigate these risks, select a vendor who provides you with a portfolio of Hybrid IT-enabled integrated systems that take out complexity, speed up deployment of data center infrastructure, and offer you an easy path to Hybrid IT. Integrated systems include a predefined, pre-integrated and pre-tested combination of data center components. Typical activities, such as infrastructure design, component integration, and testing, are executed before project start. On-site activities are confined to the on-site deployment of the integrated system.

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How to find the best-fitting cloud service provider?

Investigating the service portfolio of cloud service providers can be a daunting task. After all, you will certainly find that most often a single cloud service provider may not be able to cover all your needs. In reality, you will end up with having service contracts with more than one cloud service provider. Make sure you are engaging with a partner that holds strong partnerships with leading cloud service providers and therefore is able to give you unbiased advice as to the creation of a personalized, multi-cloud ecosystem that exactly meets the requirements of your business.

How to perform cloud migration in the most effective way?

There are various types of cloud migrations an enterprise can perform. One common model is the transfer of data and applications from a local, on-premises data center to the public cloud. However, a cloud migration could also entail moving data and applications from one cloud platform or provider to another – a model known as cloud-to-cloud migration. A third type of migration is to move data or applications away from the cloud back to a local data center – also known as reverse cloud migration or repatriation. Without proper planning, a migration could negatively affect workload performance and lead to higher IT costs – thereby negating some of the main benefits of cloud computing. Make sure you are working with a partner who has the expertise, services, and tools in place that help you migrate your workloads between different infrastructures in the most effective way.

How to bring different workload placement options together?

If you use a blend of different workload placement options, make sure to introduce a service catalog management tool to centrally manage the service delivery, life cycle operations, and user access for all IT services in your Hybrid IT environment. Such a tool should enable your IT organization to introduce new services quickly, keep control of service usage, and report and charge service consumption. Your business users gain access through an intuitive self-service portal on which they can easily find and consume all services regardless from where they are delivered; be it the on-premises data center, any off-premises data center, or any third-party cloud service.
What will my data protection strategy alongside Hybrid IT look like?

Hybrid IT is a great concept for fail-safe data protection. Many IT organizations have deployed data protection appliances in addition to, or as an alternative to, tape libraries in order to have data copies outside of production storage. However, best practice is to have a third copy on another physical site in case the main site fails completely during a disaster. For all organizations that can’t afford to run a dedicated disaster recovery infrastructure, the cloud can be a viable alternative. In such a scenario, the IT organization backs up production data on a data protection appliance. The appliance automatically triggers an additional copy to a cloud service provider. If only the production storage fails, then a fast data recovery directly from the appliance can be conducted on the main site. Should the whole site fail, then the last line of defense will sit in the cloud. Recovery time from the cloud takes much longer, of course, but recovery is still possible.

Who can support me on my journey to Hybrid IT, end-to-end?

If you are planning to transition to a Hybrid IT environment, make sure to short-list only companies with expertise in all the areas related to Hybrid IT. The company of choice should be able to offer you a one-stop shop for Hybrid IT and help you find the right balance of cloud-based services and legacy workloads. It should be able to deliver you a cleverly architected and seamlessly integrated IT environment with a governance framework that can adapt and evolve with changing business needs. Furthermore, the company should present you with a concept that ensures governance and compliance are not compromised, and privacy and security are not breached. Finally, 24/7 data availability across geographies and devices should be guaranteed.