

Extend the value of Cloud with a ground up enterprise grade approach. Start on the base foundation, with Application Modernization

While many businesses struggle with older, poorly performing systems and outdated technology there are others, that are struggling with their cloud migration complexities. Our Cloud certified professionals will deliver and empower you to the cloud upward journey faster across single, multi or hybrid cloud scenarios



Make your licenses work harder with the right cloud partner by your side. We #FocusOnYou

Whether it is AWS, Azure, or Google Cloud Platform, we help organizations to expedite their digital quotient with speed by connecting their day-to-day business operation applications through the right cloud-forward program migration, for a fully connected and modern experience for their external and internal consumers. This white paper is a brief guide to understand app modernization and the pathway to achieve it.

Regardless of the industry, today's IT departments are being asked to do more with less. Teams are struggling to meet delivery deadlines due to infrastructure changes driven by the proliferation of new approaches such as BYOD and increasingly frequent mandatory upgrade and maintenance cycles. The business community is simultaneously demanding access to better data, information, and applications at an accelerating pace. There is also a rapid increase in the sophistication and frequency of security threats and cybercrime combined with the volume and importance of specialized workloads, such as design and engineering, legacy apps modernization, and software development and testing.

In short, to stay competitive, organizations need to invest in new technologies that are going to give the required agility, flexibility, and speed. Modernizing your applications can garner benefits including enhanced user experience, reduced maintenance costs, and cloud cost optimization.

Korcomptenz follows the design thinking approach when it comes to adopting app modernization.



What is App Modernization?

Application modernization implies modernizing or updating your legacy applications with respect to modern application stack & infrastructure features to adapt to a cloud environment. This helps applications to be useful as per changing business needs and user demands. Furthermore, it helps address challenges caused by legacy applications including higher cost, lower performance, issues in meeting desired speed as well as meeting faster time-to-market.

How Can You Tell if You Need App Rationalization and Modernization?

Gaps in operational efficiency to Customer demands and Delivery

Infrastructure scale and react to seasonal demands?

You did experience a security breach recently

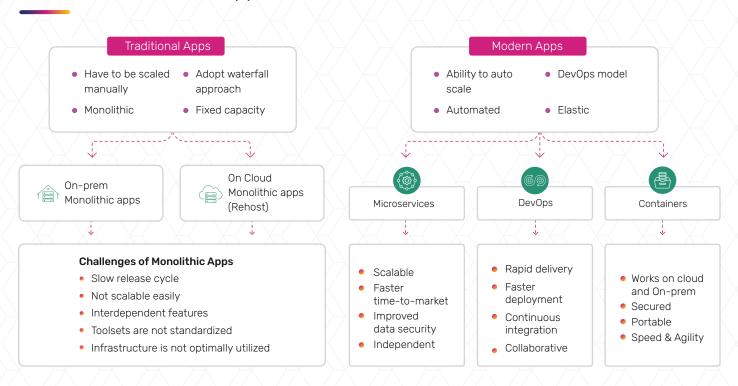
Takes too much time to go to market

Your need to optimize your data estate

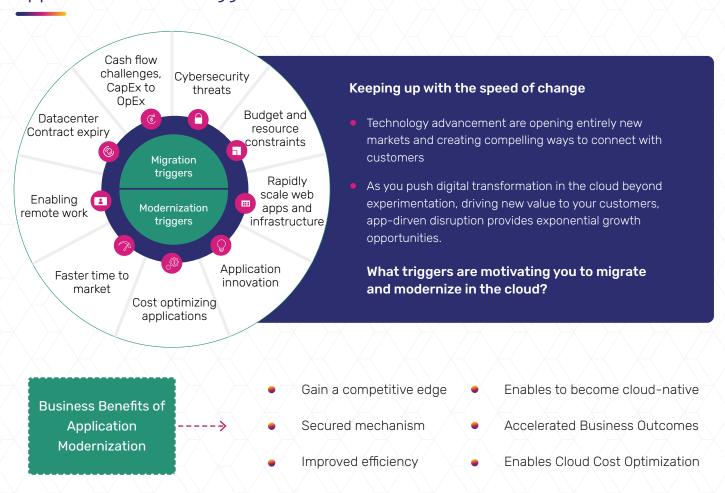
lack of Advanced security - SSO and multi-factor authentication



Traditional Vs Modern Applications

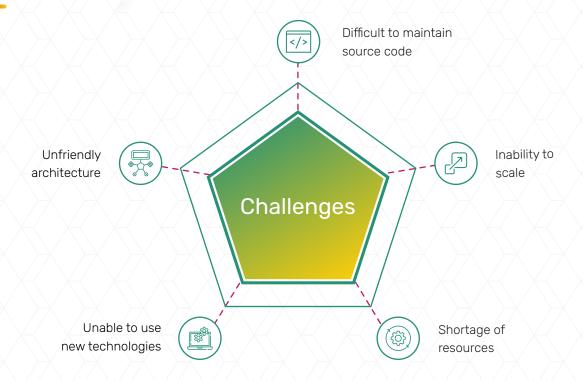


App Modernization Triggers





Hindrances to App Modernization



App Modernization Approach

Rehost- Lift and Shift:

Rehosting is also known as a "lift and shift" process. It is one of the easiest and quickest migration strategies where an application and data are moved to the selected cloud provider without change in code and architecture.

Refactor/Re-architect- On-premises to serverless:

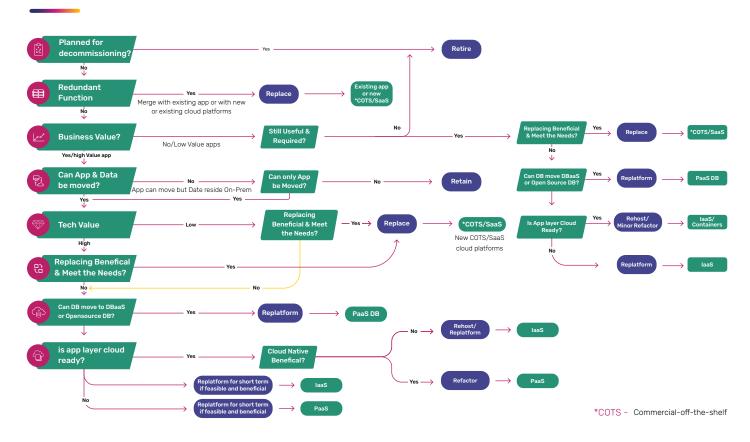
Refactoring or Rearchitecting is reimagining how the application is architected and developed typically using cloud-native features. In this, we mostly rewrite applications from scratch to make them cloud-native, elastic and DevOps complaint applications. (For example, microservices architecture, containers, Kubernetes, etc.). These refactored applications are scalable, agile and efficient. When an existing application is not compatible with cloud services, we use refactoring.

Completely Rewrite:

Replace the legacy app completely to reduce the costs, especially if the legacy app is at the end of its life and skill sets for running it are difficult to find.



App Modernization Decision Making Tree



Formula for a Successful App Modernization

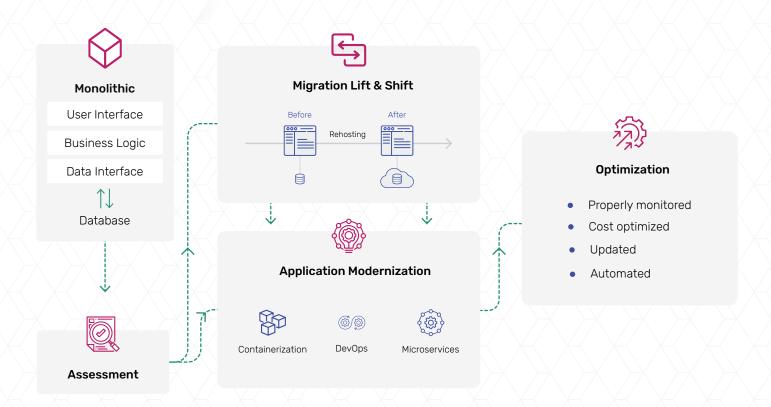


Building a Culture for App Modernization

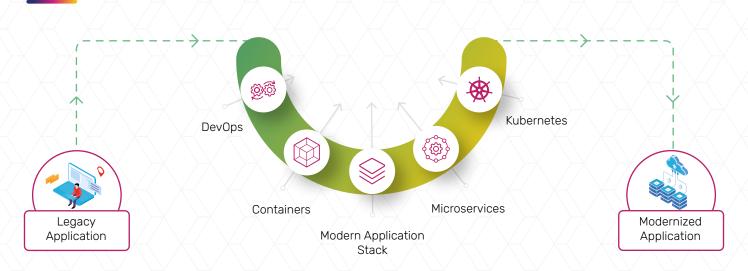
Today, ClOs, COO, CMOs, CFOs, CHROs, are all looking to expedite their digital transformation and want to get more value out of Cloud, which means with an expansive cloud adoption, cloud security and cloud infrastructure, the need of the hour is to build a Center of excellence around Cloud for an elastic operation. ClOs are constantly revisiting the cloud strategy that will provide more visibility, security, compliance, and performance on operations for their business. While Cloud offers flexibility, agility, and scalability, it's also becoming complicated with VM to containerization to becoming serverless. There are a lot of clients who have migrated to the cloud and now asking for Cloud Cost Optimization.



Lifecycle of App Modernization



Application Modernization Path





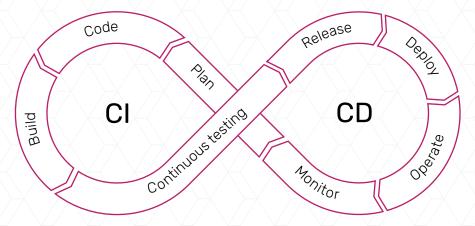
Key Technologies in Cloud Native Development

Microservices

Under this cloud-native architectural approach, there is rapid, reliable, and continuous delivery, especially for small services. It structures an application as a collection of various services.

DevOps

DevOps, a mix of Development and Operations is an approach that involves a set of practices, automation, culture, and platform that offers a collaborative way. It offers the required scalability, agility and eliminates the hurdles caused by traditional, siloed techniques for development and operations.



Containerization

Containers are lightweight software components the combine an application and its dependencies in an isolated environment. Containers can deliver business benefits along with IT benefits, as against VMs with enhanced application portability. Some organizations have achieved a significant reduction in cost per transaction when Kubernetes was adopted against legacy mainframe. Docker is a software container and imaging platform, that deploys container technology for running your applications.

App Modernization: Things You Should Know

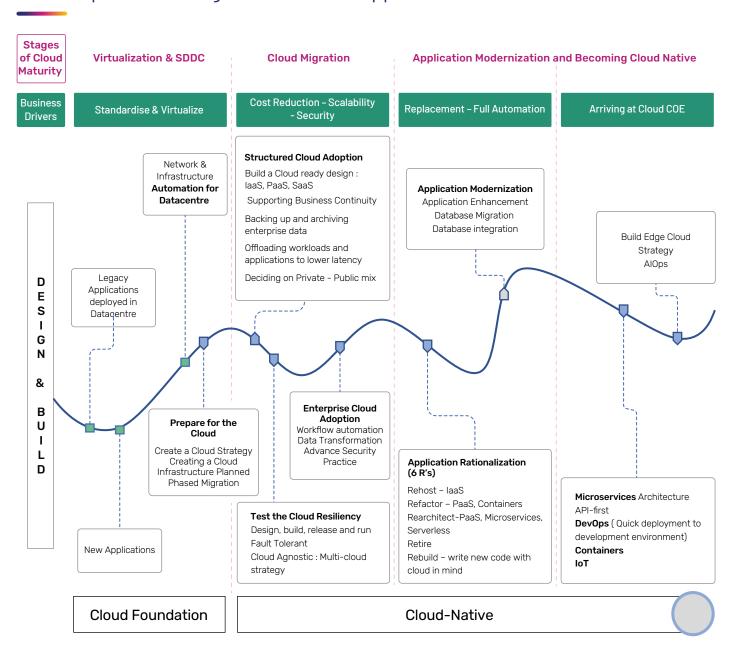
Start with a small project
 Don't waste too much time on details
 Align your culture and processes to your modernization goals
 Consider the legacy application's business process and its usage
 Do not waste time on scaling models that are unnecessary



Where are you on your Roadmap to becoming Cloud Native?

The cloud foundation has been laid many years ago, when traditional datacenter were now virtualized making network, storage and servers driven by a software. These datacenters called SDDC (Software driven data centers), instead of manually configuring hardware, the infrastructure was now controlled through software by IT teams. A fully virtualized SDDC would hold compute, store hardware, server together as a cloud infrastructure. At the onset of Cloud, there were a lot of demand on data centers with additions of many devices and applications that forced the birth of Infrastructure as a service. This enabled access anytime and anywhere through automation and management of self-service portal supported by autoscaling and resource allocation. With the pandemic the Cloud migration gave enterprises agility, speed and scale and while most witnessed everyone lifting and shifting their applications from on-prem to the cloud, it also brought in the challenges of cloud complexities. It is that the promise of cloud computing is so compelling that now enterprises are beginning to create elastic operations leading to application modernization. While the cloud migrations are clearly a factor of reassigning workloads, processes, talent available inhouse, there is a burning need that all enterprises are aspiring to adopt a cloud governance that will help them navigate to becoming a cloud native organization.

Roadmap to becoming Cloud-Native: Apps, Data, Infrastructure





A Full Suite of Services for all Your App Rationalization and Modernization Needs

Application and Data Modernization	Multi-cloud and Hybrid Consulting Services	Cloud Migration and Supporting Managed Services	Comprehensive Services Across Your Technology Stack
Take advantage of our process-first and technology-second approach for continuous modernization. Prioritize your most impactful business process and put a plan in place for continuous improvement. Identify the supporting technologies, preferred vendors, and architecture for your next generation. Define the roadmap to modernize your suite of applications with continuous ROI.	Our full stack cloud consulting services help companies quickly meet their transformation goals with innovative multi-cloud and hybrid solutions. Achieve higher productivity and a lower cost of ownership with a full spectrum of solutions including Infrastructure as a Service, Platform as a Service, and Software as a Service tailored to your needs.	Trust our certified consultants to transition your apps smoothly and effectively with minimal downtime. We solve cloud migration services with deep technical knowledge and a sharp #focusonyou. Migrate your legacy, on-premise applications and infrastructure, and then optimize your performance with continuous monitoring in the cloud.	Korcomptenz can help manage your complete technology and infrastructure stack. We provide best-in-class server and help desk services, DevOps, Active Directory, and Back Up and Disaster Recovery. Reduce cost with our compute and cost optimization model to control your technology spend.

Why Korcomptenz?

Korcomptenz offers holistic solutions across a range of cloud solutions including cloud consulting & support, strategy building, cost computing, and managed services. We are empowering clients to upgrade their tech platforms, by aiding them to build themself from the ground to the cloud while seamlessly navigating the cloud journey. We help our clients achieve more and remain competitive with a connected, secured, and scalable environment that has minimum complexities, zero security compromises, is disaster proof, high availability, and low downtime. KOR-enterprise cloud adoption consultancy and advisory specializes in building, running, and managing your current inelastic infrastructure, software, and applications in a hybrid environment that includes multiple clouds, on-premises, and the edge. We have **empowered our clients to attain a multi-layered grasp of their day-to-day operations** turning your IT cost-center into a powerful tool to accelerate business model change, optimize ROI, and lower TCO by 40%.

Discover how we #FocusOnYou at www.korcomptenz.com

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