Synopsis
Staying at the cutting-edge of innovation to provide superior service needs the capabilities of a technology enabler. The client was consciously aware of competition from low-cost airlines and rapid innovations in the industry. They were on an expansion mode, making significant improvements to their fleet, services, and stations. They wanted to bring in agility and scalability to their business operations and to enable this, they decided to migrate their backend and critical applications to cloud. Looking to lower TCO in IT infrastructure, Eurostar approached Coforge. We undertook seamless migration of the client’s services by moving the entire backend IT infrastructure and critical applications to the cloud, and delivered more value by doing so in record time.

About the Client
Eurostar is a high-speed train service provider linking the UK to the European continent. The client transports 10 million passengers a year between London, Paris, Brussels, Lille, Lyon, and Marseilles.

Business Challenge
Growing competition in the travel industry coupled with rapidly changing socio-political and economic conditions led the client to bring in necessary scalability and agility in business operations while providing exceptional customer services. One of the ways to do this was to make cloud as the cornerstone of Enterprise Architecture and optimize operational costs.

The client had over 50 business-critical applications to be migrated to AWS Cloud and a tight deadline of five months to complete the migration. Failure to complete in this ambitious timeframe could have led to increased costs for the client. Speedier migration was to be done ensuring zero disruption to business. Looking for an IT partner with resources and expertise in the Amazon cloud environment, the client approached Coforge to carry out a smooth migration and deploy the services on AWS.

Our Solution
Coforge took a series of innovative steps to ensure business continuity and flexibility during the planning phase. A PoC was undertaken to assess the feasibility of moving the backend IT infrastructure to the cloud. This ensured that the overall AWS architecture of providing infrastructure services was fit for purpose.

The key milestones in the project were:
- **Robust, Flexible, and Achievable Plan**: Delivery of services as per business criticality was planned in such a way that learning from each sprint was fed to the subsequent sprint. Straightforward and less-critical services were planned in the first few sprints after setting up the core services infrastructure in AWS.
With in-depth knowledge of the client's infrastructure from previous engagements, Coforge deployed teams that had strong expertise in cloud and the ability to use automation. Our knowledge of the client's business meant we could plan a workaround in business-critical periods in advance, ensuring minimal impact on business functions.

**The Coforge Advantage**

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**Delivery Approach:** Participation from BAU was key for infrastructure preparation for cutover after the AWS setup. Our approach ensured there was a single, accountable point of contact along with the cloud SME for setting up the AWS. BAU Lead prepared the infrastructure before handing it over to the vendors for final application migration. Agile practices were adopted and an agile team with iterative and collaborative approach was deployed for the project to be delivered within five months. Key applications and their dependencies were identified and more than 50 key services were spread for setup, migration, and cutover over seven sprints, each lasting three weeks.

**Selection of AWS Tools:** Cloud-specific tools were recommended during the execution. After due cost-benefit analysis, the recommended tools were included/implemented during subsequent sprints. The implementation of tools was planned in such a way that it would not impact the already planned cutovers.

**Infrastructure-as-a-Code:** All the services were launched using CloudFormation scripts in order to ensure that the ‘code of stacks’ of services is version-controlled via GitHub.

**Security:** Cloud tools (AlertLogic) were planned and implemented, ensuring all aspects of security were covered as per the client’s security policy. An entirely new alert management process was proposed, created, and implemented to ensure that the cloud infrastructure was exploited to its full potential.

**Decommissioning:** To ensure that the key objectives were met before decommissioning, Coforge took the initiative of ensuring that the full coverage of services was hosted in the data centers and coordinated with various other groups to ensure accountability for the movement of necessary equipment.

**Delivering Value**

- **More Agility:** Using agile practices, the project was completed in record time of five months which would otherwise have taken about 18 to 24 months, enabling smooth and hassle-free running of operations.
- **More Savings:** Quick delivery ensured operational costs were curbed and no additional expenses were incurred towards maintenance of physical infrastructure.
- **More Flexibility:** With this implementation, Eurostar now possesses the flexibility to rapidly scale up and down IT requirements in accordance with the requirements of business.