



SONATA



SONATA SOFTWARE

Scales its operations and expands memberships globally

A GLOBAL MEMBERSHIP BASED TOUR OPERATOR

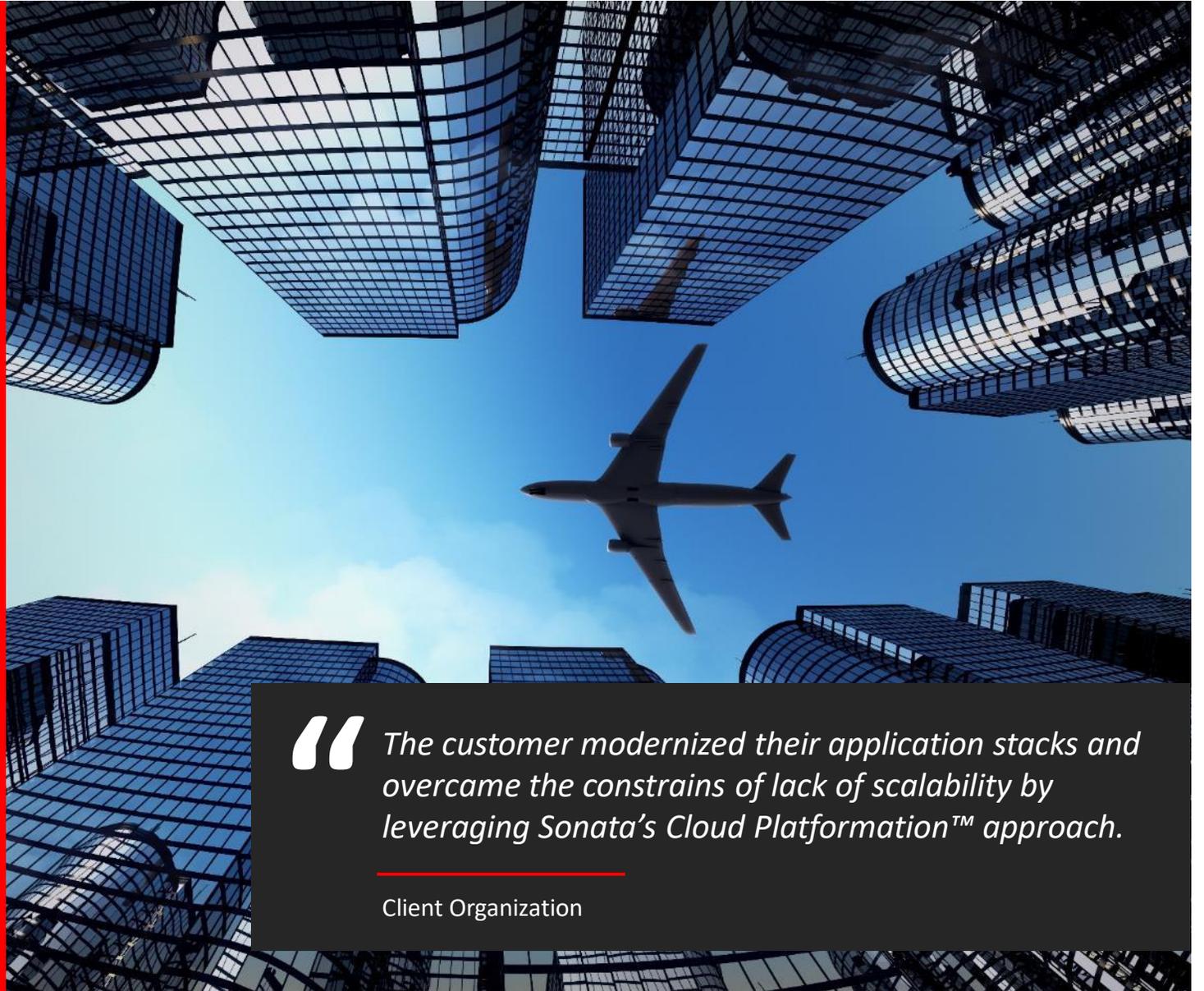


THE DIGITAL MANDATE



In 2016/2017, the customer took a strategic decision to move their existing IT infrastructure onto Cloud (specifically Amazon Web Services). This decision was in line with their Digital Agenda strategy. They created the CMAP (Cloud Migration Adoption Program) to achieve this and its key milestones are

- By 2020 – No new hardware to be procured for the On-Premise Data Center
- By 2025 – Decommission the On-Premise Data Center
- Stay ahead of competition by leveraging features of Cloud
- Make infrastructure more scalable based on demand and setup the supporting ecosystem.



“ *The customer modernized their application stacks and overcame the constraints of lack of scalability by leveraging Sonata’s Cloud Platformation™ approach.*

Client Organization

Sonata's Cloud Platformation and Application Analysis framework

Sonata's Cloud Platformation™

We conducted 6R analysis of the client's applications and profile them as digitally critical and non-critical assets. Then we charted out their respective modernization and optimization paths for optimum performance on Cloud.

Migrate and Optimize

Applications which are non-critical to the client business and which don't require scale and elasticity to operate optimally in Cloud are Migrated to Cloud and then optimized for Cost, Infrastructure, Resources and Process Improvements

Migrate and Modernize

Applications which require scale and elasticity of Cloud and are critical to the business functioning of the customer are modernized to Cloud using Sonata's mArchitecture. These modernized applications incorporate features of modern digital platforms which are Open, Connected, Scalable and Intelligent.

Application Analysis

Architecture Analysis

Licensing

Technology & Tools

Security Analysis

Cost analysis

Risk analysis



Applications Identified



Digital Profile Analysis



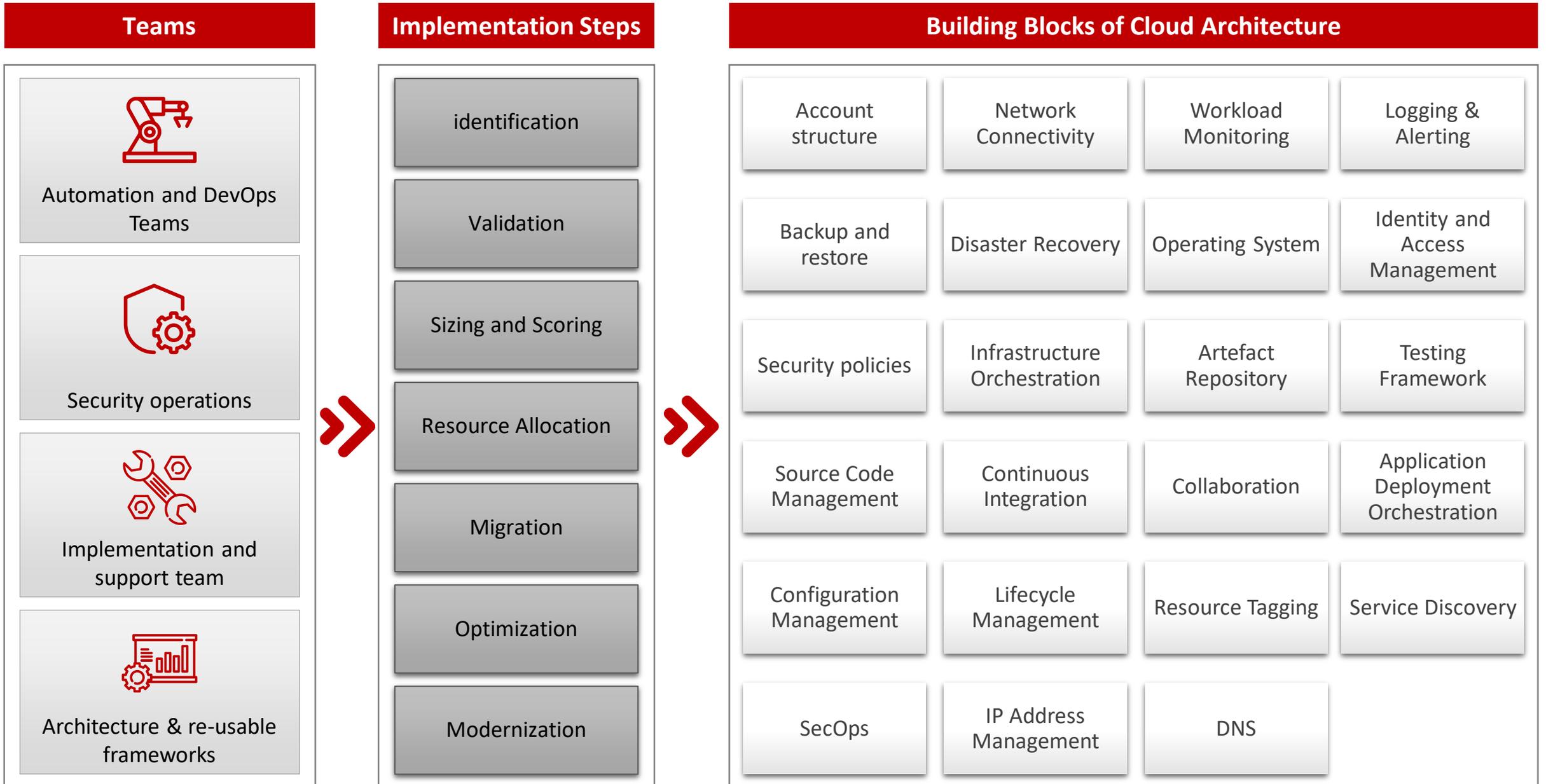
6R and Digital profile Analysis Result

Application identified for Migration

Web Search Stack:

A complex e-commerce based holiday reservation application landscape with Integration to On-Premise Back office setup.

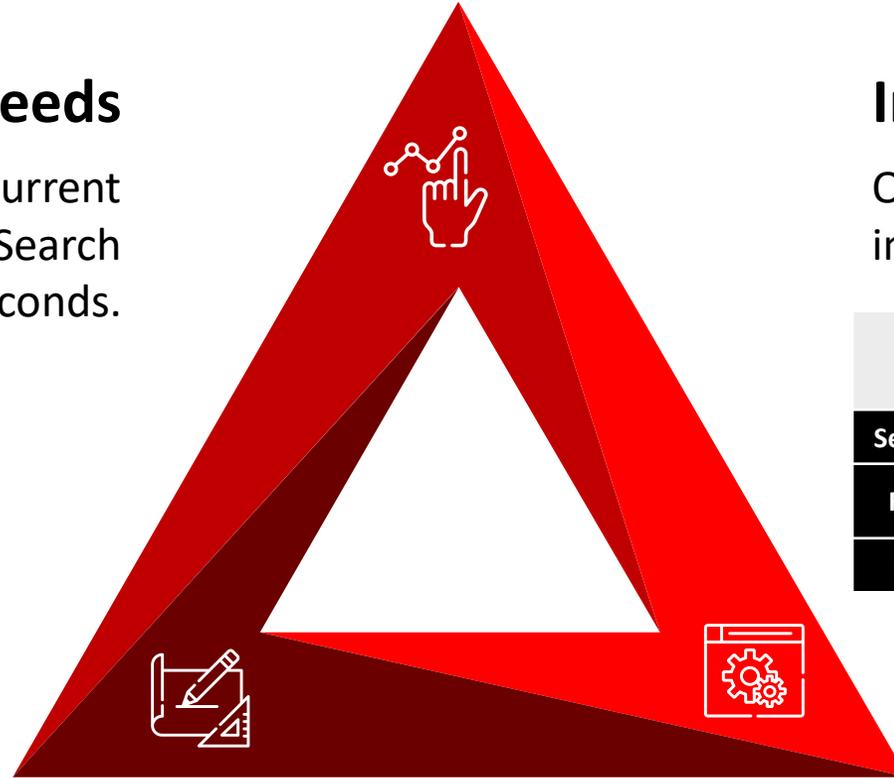
Sonata's Platformation Engineering Framework



Needs of On-Prem Application

Performance Needs

Need to improve on the Current page Load SLA for Search Application of **1.2** seconds.



Architecture Needs

Need to Design and build a number of foundational building blocks of the applications that may be used in future workloads in cloud.

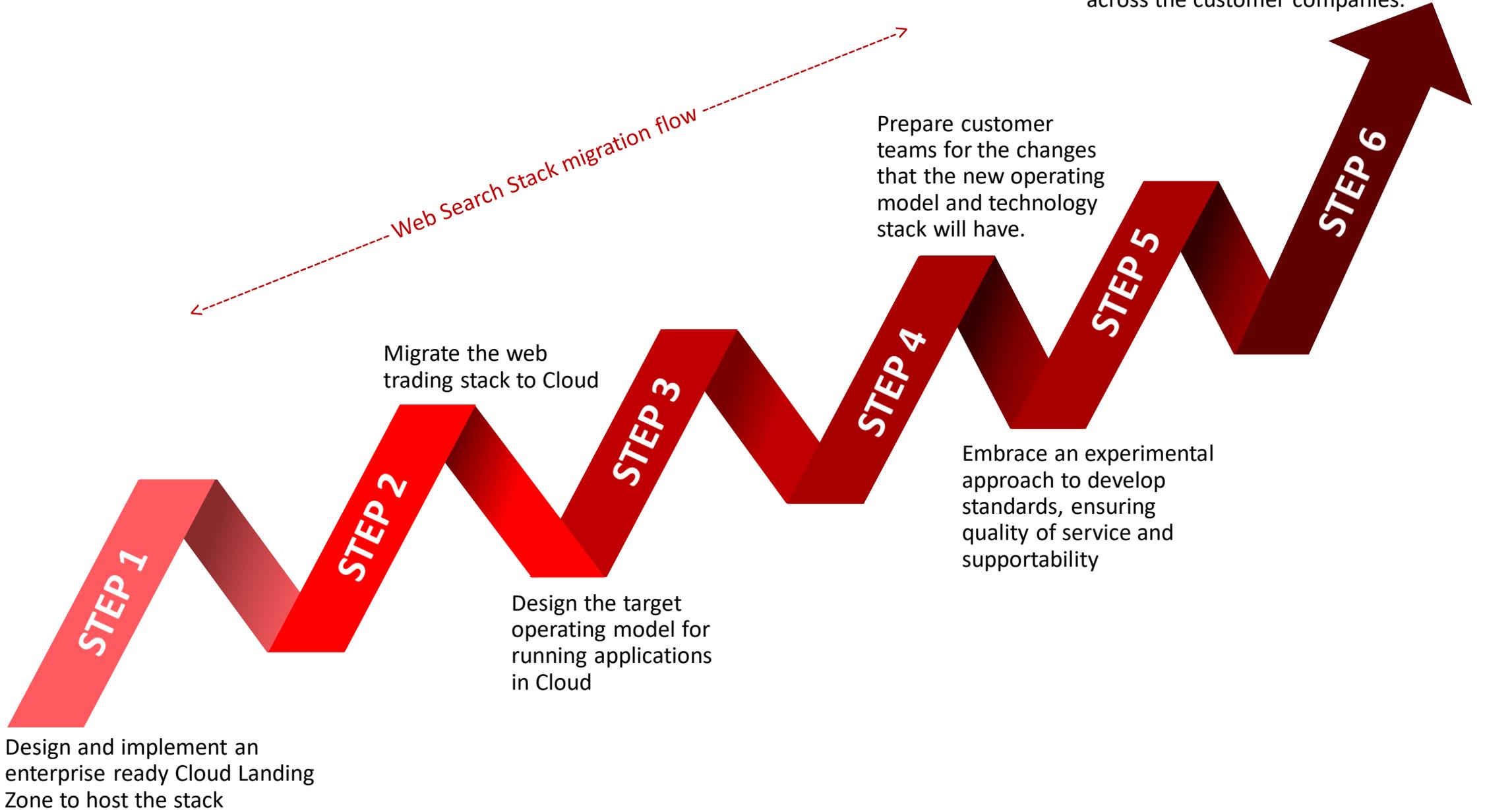
Infrastructure Needs

Optimize the use of the following infrastructure

	Hybris Admin	Hybris WEB	Endeca Assembler	Apache	ATCOM cache
Servers	2	28	24	8	12
RAM	40	386	612	12	1024
CPU	4	28	48	2	160

Migration flow

Current infra spend is **£ 5.4 M** per year



Benefits of Migration and Optimization

Migration Stats

- Achieved 100% infrastructure availability.
- Achieved Scalable and Elastic infrastructure
- Reduced test environment spin up time from 80 working days to 3 days

Infra Spend per year increased
To **£10 M** from **£5.4 M**



Optimization Stats

- Achieved better utilization of infrastructure
- Utilize 100% ISP Network Capacity
- Achieved resource reduction to maintain the infrastructure

Infra Spend reduced
from **£10 M** to **£6.5 M**



Modernizing Applications

The Following Applications were modernized

Modernize the Database from **Oracle RDS to AWS Aurora**

Convert database schema and code

Migrate data from the source database to the target database using AWS Database Migration Service

Perform post-migration activities such as running SQL queries for validating the object types, object count, and the number of rows for each table between source and target databases

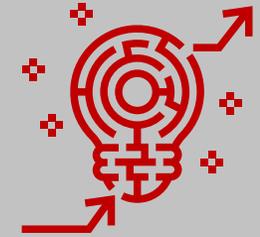
Modernize Applications to use **Elasticsearch instead of Endeca**

Batch ETL and real time synchronization feeds catalog, inventory, pricing and offers to the cloud

Export Tools from Endeca to the new search engine

Support legacy URL during migration and maintaining it with ES based implementations

Test new services to ensure that the relevancy is better.



Benefits

- Reduction in DBA activities
- AMC Cost reduction 300 K for Endeca
- License cost reduction of 300K for replacing Endeca with Elasticsearch
- Performance improvement

Value Created by Modernizing the Applications

DIGITAL THROUGH PLATFORMATION™



OPEN

- Industry standard interface options for new trade partner onboarding
- Flexible provision for new service providers and payment gateways on demand



SCALABLE

- Scalable infrastructure to address demand spikes
- Provision of adding unlimited number of new vendors for packages, services and for operations
- New rules and policies can be configured with ease



CONNECTED

- Real-time data exchange with third party entities using Built-in integration framework
- Customer & context specific notifications, promotions and offers based on AI



INTELLIGENT

- Customer data & web analytics for contextual recommendations and personalized experience.

Performance



+35%

Search Performance Gain



+10%

Page Load Performance Gain

Resource Efficiency



100%

Infrastructure Availability



100%

ISP Network Capacity

Operational Results



153k

Peak Hour Searches



6861

Peak Day Bookings

Business Agility



10%

Reduction in cost/year



+15%

Traffic Volumes



+3%

Customer Satisfaction Score