

**Treggs**

**Business Evaluation**

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| **Global e-commerce platform** | **Values** | **Immediate Goals** |
| Treggs is an American global travel agency that wants to build a scalable e-commerce platform to serve a global customer base | ● Excellent customer service  ● Social engagements  ● Individualized pricing based on customer preferences and demand  ●Regulatory Compliance | User interface  Social media Integration  Search for a flight-hotel combination to a destination on specific dates  Order placement  Supply hotel Inventory  Analyze the sales performance data of all suppliers  Adapt disaster recovery plan |

**Key business assumptions**

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| **Strong social integration,**  **bulk supply hotel inventory and analysis of sales performance data of suppliers is necessary to the business** | **Strong focus on regulatory compliance, minimized latency, dynamic scaling and excellent customer service are required to meet business goals** | **Potentially different storage solutions for the product itself and analytics** |

**Technical Evaluation**

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| **Current State of Business** | **Technical Watch points** | **Proposed Product** |
| American company  Global customer base with large group of customers in Europe  Complied to all regulatory standards so far in day-to-day operations  Supplier Inventory, Manual bookings | Services need to be highly available, secured and meet regulatory compliance  Inventory, online order processing and booking, upload inventory | Shared Authentication Service (Third Party)  Distributed micro services; scale to meet requirements easily  Containers, GKE, Autoscaling, Load balancing  **Managed service where needed**  Cloud SQL, Firestore, Cloud Storage  Custom VPC  Multi-regional Subnets  Place them into us-central1 and europe-west2  global HTTP Load Balancer to directs traffic to public facing services  Cloud Armor  Cloud DNS  PCI DSS  PII Redaction  Audit logs  Private Google access to services  Cloud VPN  CDN  **Cost optimization:**  Initially deploy backends in us-central1 which reduce latency for European users  **Disaster recovery**  Multi-regional Cloud Storage bucket for backups  RPO and RTO Priorities  Daily automated back ups  Failover replica in another zones  Binary logging and backups |
| Excellent customer service  Suppliers partnership and social media presence | Avoid customer pains and reduce downtimes  Partner and Strong social integrations | Monitoring, Logging and Observability  **KPIs**  Develop KPIs to measure engineering efficiency and product performance  Use SLOs and SLIs and ensure SLOs are defended over short term  **APIs**  REST APIs design; enable easy integrations  API endpoints  Apigee |
| reporting service is supported by an on-premise server with limited ability to provide insights into travel trends | Analysis of the sales performance data of all our suppliers | BigQuery |
| Business ROI has remained high year-over-year compared to the amount invested during expansions | Product operation cost should be minimal | Pricing calculator for cost estimation and pricing |