



## Business Evaluation

Online health records site	Values	Immediate Goals
Due to rapid changes in the healthcare and insurance industry, EHR Healthcare's online health records software business has been growing exponentially year over year.	<ul style="list-style-type: none"><li>● Provide highly available services to customers</li><li>● Maintain regulatory compliance</li><li>● Stay current on industry trends</li></ul>	<ul style="list-style-type: none"><li>● Scale their environment</li><li>● Adapt their disaster recovery plan</li><li>● Roll out new continuous deployment capabilities to update their software at a fast pace</li><li>● Provide consistent logging, monitoring, and alerting capabilities</li></ul>

## Key business assumptions

<b>Rapid changes and exponential growth in the industry will continue and analysis of these changes is necessary to the business</b>	<b>Strong focus on regulatory compliance, reduced latency, and excellent customer service required to meet business goals</b>	<b>On-premises legacy integrations with insurance providers will not be upgraded in the immediate future and will need to be supported as-is for now</b>
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## Technical Evaluation

Existing Environment	Technical Watch points	Proposed Solution
Customer-facing applications are web-based, and many have recently been containerized to run on a group of Kubernetes clusters.	<b>Compute</b> <ul style="list-style-type: none"><li>● Containerized applications</li><li>● Needs to run in the cloud and integrate with on-premises systems</li><li>● Autoscaling, low latency</li><li>● Robust logging, monitoring and alerting required</li></ul>	<ul style="list-style-type: none"><li>● Anthos Clusters and Google Kubernetes Engine</li><li>● Google Cloud's operations suite (includes Cloud Monitoring and Cloud Logging)</li></ul>
Software is currently hosted in multiple colocation facilities. The lease on one of the data centers is about to expire.	<b>Storage</b> <ul style="list-style-type: none"><li>● Multiple databases including MySQL, MS SQL Server, Redis, and MongoDB</li></ul>	<ul style="list-style-type: none"><li>● Cloud SQL (for MySQL and MS SQL Server data)</li><li>● Memorystore for Redis</li><li>● MongoDB Atlas on Google Cloud</li></ul>
Data visualization	Data needs	<ul style="list-style-type: none"><li>● Dataflow for bulk and</li></ul>

<ul style="list-style-type: none"> <li>● Nonexistent or minimal</li> </ul>	<ul style="list-style-type: none"> <li>● Fast on-boarding of insurance providers and their data</li> <li>● Data Analytics needed to predict industry and health care trends</li> <li>● 99.9% availability for customerfacing data systems</li> </ul>	<p>stream processing</p> <ul style="list-style-type: none"> <li>● BigQuery for storage and analytics</li> </ul>
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