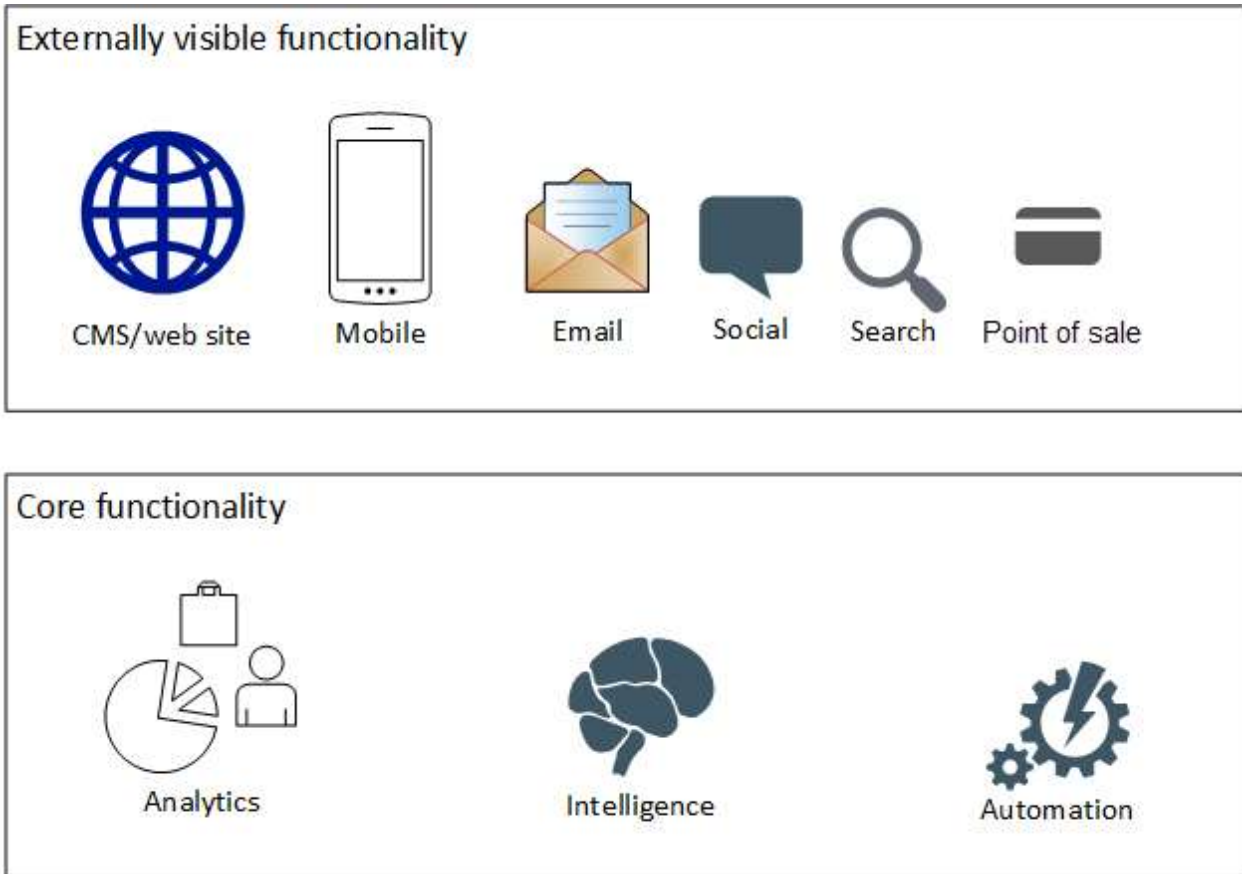


Migration strategy of an e-commerce application

A typical retail business relies on a large collection of software solutions that range from customer-facing applications, down through the stack to foundational applications. The following drawing shows a view of the functionality present in a typical retail business.

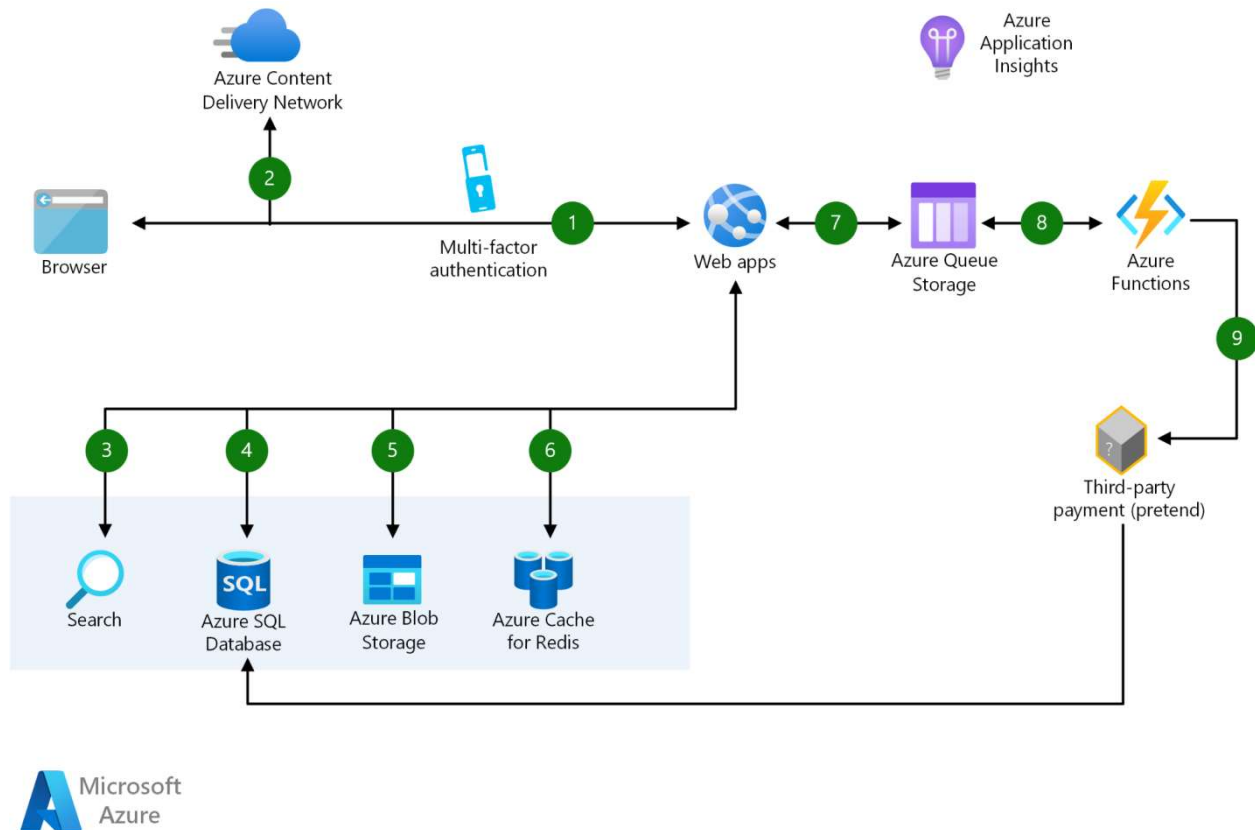


The components in the above diagram are listed below -

- 1) CMS - A content management system, often abbreviated as CMS, is software that helps users create, manage, and modify content on a website without the need for specialized technical knowledge.
- 2) Mobile/Cell Phone - An application for customers to browse and purchase products from the business. Also referred to as handheld device application.
- 3) Email - This can be used for sending invoices and information about discounts to the customers.
- 4) Social - The social media pages maintained by the business.
- 5) Search - This component will allow customers to search through the catalog of products offered by the business.

- 6) Point of sale - This will be used by customers to pay for products bought from the business.

Based on these components, the below deployment plan shows the services that can be potentially used



- 1) Taking the above deployment plan into account, devise a plan for migrating the on-premises e-commerce application to the Azure cloud, using the below phases. Also, list the Azure services that may be required in each phase - 20 points
 - a) Rehosting - Also referred to as "lift and shift," this stage entails migrating physical servers and VMs as-is to the cloud. By simply shifting your current server environment straight to IaaS
 - i) Analysis
 - ii) Migration
 - iii) Optimization
 - b) Refactoring - Application Refactoring is the rewriting of one or more components of an application, typically to take advantage of public cloud services. This can also involve refactoring the traditional application from a legacy 3-tier application design to granular, microservices based applications.

- c) Rebuilding - This stage means to revise the existing application by aggressively adopting PaaS or even SaaS services and architecture. The process encompasses major revisions to add new functionality or to re-architect the application for the cloud.
- 2) Calculate the monthly cost of deploying the e-commerce application on Azure based on the given deployment plan. Assume an enterprise similar to [Walmart Online](#) . For simplicity, you can scale down the numbers and mention the assumptions in the submission. - 10 points
- 3) Identify the risks associated with migrating the application to the cloud and suggest ways of mitigating them. - 5 points
- 4) Devise a 2-minute brief (100 words or less) to convince senior management of the benefits and criticality of performing this migration task. - 5 points