AWS provides subscribing companies with flexible computing power and data storage, as well as data management, messaging, payment, and other services that can be used together or individually as the business requires. Anyone with an Internet connection and a little bit of money can harness the same computing systems that Amazon itself uses to run its now $48 billion a year retail business. To make the process of harnessing the cloud simpler, Amazon added an automated service called CloudFormation that helps customers get the right amount of computing resources. Customers provide the amount of server space, bandwidth, storage, and any other services they require, and AWS can automatically allocate those resources.

Zynga is a good example of a company using cloud computing to improve its business in a new way. Zynga is the developer of wildly popular Facebook applications like FarmVille, Mafia Wars, and many others. With over 290 million monthly active users, Zynga's computing demands are already significant. When Zynga releases a new game, however, it has no way of knowing what amount of computing resources to dedicate to the game. The game might be a mild success, or a smash hit that adds millions of new users. The ability to design applications that can scale up in the number of users quickly is one of Zynga's competitive advantages.

Because of the uncertainty surrounding resource usage for new game launches, Zynga uses Amazon's cloud computing platform to launch new offerings. That way, it can pay only for the resources it ends up using, and once game traffic stabilizes and reaches a steady number of users, Zynga moves the game onto its private zCloud, which is structurally similar to Amazon's cloud, but operates under Zynga's control in data centers on the East and West coasts. Zynga's own servers handle 80 percent of its games. (Zynga recently started selling extra capacity on zCloud to other game-makers.) To streamline the process of moving application data from Amazon to the zCloud, Zynga has automated many computing tasks, selected hardware and chip configurations that are very similar to Amazon's, and makes significant use of virtualization.

Questions:
Q1. How companies like Zynga benefit from cloud?
Q2. What business benefits do cloud computing services provide? What problems do they solve?
Q3. How do Outback Steakhouse and Interncontinental use cloud?

There are a few reasons why Zynga is well- suited to use this combination of public and private clouds. The first is its business model, which involves games that have a tendency to be boom or bust. Rather than spending on computing resources of its own before the launch of each game, it's much more cost-effective to use Amazon's cloud services until Zynga can more accurately predict the computing power it needs. As a recent start-up, Zynga lacks the accumulated legacy systems and infrastructure typically found in older companies. The more systems a company has, the tougher it is to integrate its applications and data with cloud systems.

Not all companies use cloud computing in the same way that Zynga does, but many do. Outback Steakhouse wasn't sure how popular an upcoming coupon promotion would be, so the company used Microsoft's Azure cloud to launch the promotion. Outback ended up selling an unexpectedly large 670,000 coupons. Using the cloud, it was able to avoid taxing in-house systems unnecessarily.

InterContinental Hotels has revamped its infrastructure to include both private and public cloud usage. To improve response time for customers, InterContinental moved its core room reservation transaction system onto a private cloud within its own data center, but it moved room availability and pricing Web site applications onto public cloud data centers on the East and West coasts. In fact, InterContinental hopes to put all of its publicly accessible information in these public clouds so that customers receive faster results to site queries. Customers receive data faster if the data are located on a server that is physically close to them, and cloud computing helps InterContinental to take advantage of this.

Start-up companies and smaller companies are finding that they no longer need to build a data center. With cloud infrastructures like Amazon's readily available, they have access to technical capability that was formerly only available to much larger businesses. For example, online crafts marketplace Etsy uses Amazon computers to analyze data from the 1 billion monthly views of its Web site. Etsy can then use its findings to create product recommendation systems that allow customers to rank which products they like best and to generate a list of 100 products they might enjoy. Etsy's engineers and managers are excited about their ability to handle these types of