Amazon case study accounting information system assignment

Amazon: From Book Seller to Service Provider 1. Amazon’s strategy is to maintain its role as an online retailer while diversifying its product and service line. [1] While many people still see Amazon only as an online book retailer, this is no longer true. Amazon is now best described as a technology retailer. Capitalizing on its large and reliable Internet infrastructure, Amazon Web Services now include the following: Simple Storage Service (S3), Elastic Compute Cloud (EC2), SimpleDB, CloudFront, SQS, Flexible Payment Service and Mechanical Turk. [2] These services are aimed at helping other companies to succeed.

Amazon has moved away from its original core competency as an online book seller and has become a technology firm. [3] Further evidence of this is found in Amazon’s launch of the Amazon Kindle, an electronic reader developed by the Amazon. com subsidiary Lab126. This places Amazon squarely in the hardware and software development business, a further diversification of its interests. 2. Amazon is competing with Google and Microsoft because Google and Microsoft offer their customers rival computing solutions, including database management, storage, and running programs on remote servers.

In short, Amazon, Google and Microsoft are all offering business solutions to companies. These solutions include Software as a Service (SaaS) and Hardware as a Service (HaaS). It is only a wise strategy for Amazon to compete with Google and Microsoft if Amazon can maintain a competitive edge as a technology firm. As an online retailer, Amazon is doing well and has recently posted strong earnings, but this is largely because of book store bankruptcies and problems at e-Bay.

Amazon may be doing well in the retail market but it will have to remain innovative if it wants to stay competitive in the area of SaaS and HaaS business solutions, and to stay ahead of Google's and Microsoft's development of new platforms. The strategies of Google, Microsoft and Amazon are very similar: they are offering medium-to-large companies the means (such as cloud services) to store data on and undertake processing through the Internet, and at a competitive price. 3. Amazon's services, especially its S3 services, can help companies ignificantly reduce storage costs as they use Amazon's own storage capacity. For example, by using Amazon's S3, companies do not need to purchase IDE disks, RAID controllers and single CPU servers. One company recently reported a $500, 000 annual saving using Amazon S3. [4] Similarly, Amazon's EC2 can reduce business overhead as companies can host software directly on Amazon servers. [5] Todd Pacific Shipyards Makes Effective Use of Information Systems 1. The Time Tracking application is already linked to project management, payroll, accounts payable and employees' time and work assignments.

If I were the CIO at Todd Pacific (and only thought about the bottom line), I might also link the Time Tracking application (which is a wireless application) to: • customer billing • inventory management, particularly for just-in-time manufacturing • employee performance reviews • capturing personnel data in order to match employees to assignments or to re-assign employees to different tasks • contract management with unions • employee e-mail, so that information could be sent quickly and efficiently to employees, particularly when a dangerous situation arises • workplace accident reporting. . If I were a worker at Todd Pacific, I would have serious concerns

about the Time Tracking application and its impact on my privacy. I would be concerned about the security of my personal data, especially my payroll data as it includes my personal banking information. As Time Tracking uses wireless transmission of data, this means the data is vulnerable to hackers and could be intercepted. I would also be concerned that the Time Tracking application would be unfairly linked to my performance review.

I might suffer stress because I would feel that management at Todd Pacific was “ watching” me at all times, even when I was on lunch or taking statutory coffee breaks. I would wonder if this “ private” information would be used against me and without my knowledge when it came time to lay people off or give promotions. Perhaps my boss would see we were all good workers but that one of my colleagues always takes a shorter lunch than I do. My boss might decide to lay me off and keep the guy who always takes a shorter lunch. 3. I think the new system at Todd Pacific would not be welcomed by the union.

The union would see the system as a way of tracking employees everywhere they go, including trips to the bathroom and during coffee breaks. While Todd Pacific would tell the union that the tracking was for increasing efficiency, the union would see it as an invasion of privacy. The union would also see time tracking as a way of discouraging staff from becoming involved in union activities. The union would only agree to tracking if strict guidelines were first put into place to control the Big Brother aspect of the system.

The union would insist that the system could not be used for performance reviews and that time tracking information could not be used to unfairly

influence firing, lay-offs or promotions. The union would also express concerns about the reliability of the tracking program and hardware. If malfunctioning, the equipment might record an employee absence that actually did not take place. Also tracking systems tend to suggest there is only one way or “ the best way” of doing a task, such as delivering a part. If an employee uses a way that is not recognized by the system, and even though it is efficient, he or she might be punished.

I do not see any union welcoming this system, except possibly for its ability to record overtime. Click Fraud 1. Yahoo and Google can catch click fraudsters by working in co-operation with companies that have developed specialized software programs to catch or block fraudsters. These programs can, for example, review IP addresses in order to determine when a single user (that is, an identical IP address) is clicking multiple times on the same ad. The IP address can be traced to an Internet Service Provider which, in turn, can provide information on a specific user.

Yahoo and Google can also provide website metrics/analytics to customers that can, for example, determine a sudden increase in the average number of daily clicks, a major and unexplained increase in the click-through-rate, a major and unexplained change in bounce rate (when a website visitor leaves a page or a website without visiting any other pages on the same site), when there are very short visits to a website without any reason for it and when there are many clicks but a low conversion rate (the percentage of visits that result in a purchase).

All of these situations point to possible click fraud. One thing is sure: Yahoo and Google cannot catch click fraudsters alone. They will have to rely on, or work closely with companies that have developed the expertise to detect fraud. Such a company is ClickTracks, which has started a service that analyzes 20 variables surrounding each click and compares them with historical data to determine which are legitimate. [6] To date, Yahoo and Google have been better at detecting fraud than actually catching the fraudsters. 2.

It is not a stretch to think the value of Google and Yahoo can be decreased as a result of click fraud. Google, for example, admitted in 2007, that it loses $1 billion a year to false ad clicks. [7] This does not inspire confidence in investors, the public or advertisers. Both Yahoo and Google have not been able to show consistently that they can address the problem of click fraud. In 2008, the MarketWatch. com website reported that Google shares had fallen more than 4% following a decrease in clicking on ads – the company’s main source of revenue.

Google attributed this decrease, in part, to technical problems experienced in trying to reduce “ accidental” clicks. Google’s efforts to reduce fraud have actually led to a flattening of its revenues. [8] To continue to succeed, Google and Yahoo must demonstrate to investors and customers that they are seriously addressing the issue of click fraud. Data Mining the Races — It’s About Winning 1. McLaren offers three software products: a System Monitor application tool, ATLAS data recording, display and analysis software and SQL Race.

System Monitor manages all the program and data versions in an electronic control unit and provides the developer, tuner and race engineer with complete and flexible access to the maps, logging parameters, errors and events held in a motorsport control unit. ATLAS provides a real-time link to the car on the track (in categories in which telemetry is permitted) with advanced display and analysis capabilities. The software can be used as standalone software to handle all the dyno and garage analysis needs or linked to team tools and race sheets via ActiveX.

SQL? Race is an API (Application Program Interface) for Microsoft SQL Server® 2008. It provides the building blocks to store and manage immense volumes of track, simulation and set-up data in its many different formats. [9] MacLaren’s software programs could be adapted to the business world. The System Monitor application tool could be modified and applied to manage the configuration and tuning of an assembly line control system. The System Monitor tool could be used to create a “ smart” assembly line to increase quality control and reduce human error.

In the same way the System Monitor provides the race team with vital data, the System Monitor could be used to gather data and provide the assembly line manager with detailed information on performance. This information could be used to improve efficiency and increase competitiveness. An application like ATLAS, which uses sensors and real-time telemetry, could be applied to a range of business opportunities. Let’s take the example of a telephone company. Normally, when telephone service is interrupted, the telephone company learns about it when customers complain.

Using sensors and telemetry, the telephone company can receive information about a system problem before a customer knows about it. The sensor telemetry also provides a permanent record of the interruption, which can be used when reimbursing customers for loss of service. Again, with a telephone company, sensors can detect line failure and instantly transmit data pinpointing the break. A repair crew can then be sent to a specific location, saving time and effort. Without sensors and telemetry, “ manual” searching for line damage is inefficient, time-consuming and costly.

With sensors and telemetry, repair crews also receive more detailed information on the break, which increases their safety and better prepares them for the repair. In the end, a sensor and telemetry system, like ATLAS, has the potential to save companies a lot of money and give customers better service. An application like SQL Race, which provides fast access to large quantities of time series data, could be used by any business that uses frequent customers surveys or regularly gathers data, to determine trends and do forecasting. SQL Race would be an ideal tool for data mining as it can ollect and analyzes large quantities of data. 2. Data mining can improve customer response as it gives companies a better understanding of what customers really want. Data mining helps businesses better understand buying behaviours, which allows companies to better design their stores, recommend specific or new products to customers, determine which products customers like best (and which ones sell fastest), determine customer readiness for new products and services and gauge how customers will react to changing prices. Ultimately, data mining helps companies to attract and retain customers and to meet their needs and expectations.

Service-Oriented Architecture at TD Banknorth 1. TD Banknorth implemented services-oriented architecture (SOA) out of necessity as one of its key technology suppliers could no longer support an application that helped the bank integrate its Internet banking application and back-end systems. Banknorth was forced to re-evaluate its situation when it lost this support and decided on services-oriented architecture as it offered multiple benefits, including the power to reuse services (such as the ability to look up customer accounts in new applications) and to monitor business processes.

Banknorth’s first SOA project allowed the bank to globally update customer information in all customer products and services. SOA also gave Banknorth the opportunity to create a more sophisticated online banking service in which all related customer accounts could be looked up, including mortgages, insurance products and credit cards. Again, the emphasis was on high reuse of information. 2. I think that security would be one of the main concerns for the bank.

While SOA can offer real business value (as shown by the case of TD Banknorth), it also poses security and compliance risks. These are important considerations for banks as they deal with highly confidential information. SOA is known to present data availability risks (threats of which data can be instantly accessed), data confidentiality risks (threats of exposing the information stored on a system is protected against unintended or unauthorized access), data integrity risks(threats of the accuracy and consistency of the data in a distributed system), endpoint integrity risks threats of the accuracy and consistency of definable event in a study takes place) and access control risks (threats of exposing the management of

admission to system and network resources to the outsiders). For example, a hacker could configure the bank's Web Services consumer to send an unauthorized database query. This means that the hacker could obtain a client's bank card information, credit card information or mortgage information. Since the system focuses on re-use of information and " one-stop" look-up of all customer records, this would provide a hacker with full financial information on a customer.

The bank would need to reassure customers that it uses a highly-sophisticated firewall to prevent this type of unauthorized use. In general, the bank would need to constantly upgrade its security system and train its employees on how to use the upgrades. ————————– [1] See http://mashable. com/2007/10/23/amazon-results: " Amazon's S3 service now hosts more than 10 billion files, doubling in just the past six months. Meanwhile, an additional 25, 000 developers signed up for the company's web services program in the past quarter, bringing the total to 290, 000.

Additionally, sales from third-party merchants (aka, affiliates and people selling via Amazon's web services) made up 32% of total sales. All of these factors point to Amazon diversifying its revenue, ..." [2] See http://perspectives. mvdirona. com/2009/03/04/WTIAScalingIntoTheCloudWithAmazonWebServices. aspx. [3] See " Amazon Posts Profit Gains as Offline Rivals Struggle," http://www. nytimes. com/2009/04/24/technology/companies/24amazon. html [4] See http://benmetcalfe. om/blog/2006/11/amazon-s3-cost-savings-and-the-future-of-utility-computing-services [5] See http://www. articlesbase. com/web-hosting-articles/who-should-use-amazon-ec2-484906. html [6] See http://my.

opera. com/djysrv/blog/index. dml/tag/click%20fraud [7] See http://www. cbc. ca/news/story/2007/03/02/tech-googleclickfraud-20070302. html [8] See http://www. marketwatch. com/story/googles-shares-fall-as-data-show-drop-in-paid-clicks [9][pic][10]. /03EHJX]`csy...? ¤u For details on software applications, see http://www. mclarenelectronics. com/Products. asp? type= Trackside