



Management Information System MIS 201

Semester 1 (2018-2019)

Assignment Details

Prepare an in-depth analysis of four case studies during the semester. Here are some guidelines:

- This is an individual assessment, which is a part from your course score. It requires effort and critical thinking
- This assignment will worth 25 mark (Case Study Questions 15 Marks/ Presentation 10 Marks)
- Answer all the questions listed below for each case.
- The 'answers' to the questions are best formulated by reviewing the case and the reading materials up and including the current week in the course.
- The questions are worded to help you apply the readings to the case, so don't limit yourself to the case's terminology and perspective. The best analysis will abstract the case content by applying the reading materials to draw broader lessons about the material
- As for the **Presentation** you should summarize your analysis of only one case study in a set of PowerPoint slides

Case Study 1: Apple Merging Technology, Business, and Entertainment

- 1) Why are data, information, business intelligence, and knowledge important to Apple? Give an example of each type in relation to the iPad. **(1 Mark)**
- 2) Explain how Apple achieved business success through the use of information, information technology, and people. **(1 Mark)**
- 3) Evaluate how Apple can gain business intelligence through the implementation of a customer relationship management system. **(1 Mark)**

Case Study 2: Vail Ski Resorts Goes High-Tech for High Touch

- 1) List and describe the types of systems described in this case study. **(1 Mark)**
- 2) How do these systems improve the operation of the business? **(1 Mark)**
- 3) How do these systems support decision-making? Identify 3 different decisions that can be supported by these systems. **(1 Mark)**

Case Study 3 : Walmart

- 1) How IT and IS may be used to help the company operate and achieve its objectives. **(1 Mark)**
- 2) Discuss the challenges faced by the CIO - which are the most important and why? **(1 Mark)**
- 3) What role does information technology play in the business? How is it helping Walmart refine its business strategies? **(1 Mark)**
- 4) Summarize the main purposes of information systems in organizations **(1 Mark)**

Case Study 4: Zappos

- 1) Define SCM and how it can benefit Zappos. **(1 Mark)**
- 2) Explain CRM and why Zappos would benefit from the implementation of a CRM system. **(1 Mark)**
- 3) Demonstrate why Zappos would need to implement SCM, CRM, and ERP for a connected corporation. **(1 Mark)**
- 4) Analyze the merger between Zappos and Amazon and assess potential issues for Zappos customers. **(1 Mark)**
- 5) Propose a plan for how Zappos can use Amazon's supply chain to increase sales and customer satisfaction. **(1 Mark)**

Case Study 1: Apple Merging Technology, Business, and Entertainment

This might sound hard to believe, but a bit more than a decade ago, Apple was on the brink of bankruptcy. Apple Computer Inc., now back from near oblivion, is blazing a trail through the digital world with innovation and creativity that has been missing from the company for the past 20 years. The unique feature of Apple's competitive advantages is that they come from customers and users, not Apple employees. That's right; the company welcomes products created by consumers to sell to consumers, a trend new to business.

Capitalizing on the iPod

With millions of iPods in the hands of consumers, many people are finding ways to capitalize on the product. John Lin created a prototype of a remote control for the iPod and took his prototype to *Macworld*, where he found success. A few months later, Lin's company had Apple's blessing and a commitment for shelf space in its retail stores. "This is how Apple supports the iPod economy," Lin said. In the iPod-dominated market, hundreds of companies have been inspired to develop more than 500 accessories—everything from rechargers for the car to \$1,500 Fendi bags. Eric Tong, vice president at Belkin, a cable and peripheral manufacturer, believes that 75 percent of all iPod owners purchase at least one accessory—selling over 30 million accessories to date. With most of the products priced between \$10 and \$200, that puts the iPod economy well over \$300 million and perhaps as high as \$6 billion. Popular iPod accessories include:

- Altec Lansing Technologies—iPod speakers and recharger dock (\$150).
- Belkin—TuneCast mobile FM transmitter (\$40).
- Etymotic Research—high-end earphones (\$150).
- Griffin Technology—iTrip FM transmitter (\$35).
- Kate Spade—Geneva faux-croc mini iPod holder (\$55).
- Apple—socks set in six colors: green, purple, blue, orange, pink, and gray (\$29).
- Apple—digital camera connector (\$29).

Capitalizing on the iPhone

Looking at someone using an iPhone is an interesting experience because there is a good chance they are not making a phone call. They could be doing a number of things from playing a game to trading stocks, watching a TV show, or even conducting business with a mobile version of salesforce.com's customer-management software. In a brilliant strategic move, Apple let outsiders offer software for the iPhone and in less than six months, more than 10,000 applications had been created. In fact, more than 15,000 applications are available at its app store section of iTunes, and they have been downloaded a total of 500 million times. Now, many of the iPhone apps are available for the iPad. The iPhone and iPad app store market is getting so huge relative to other smartphone markets that some developers argue there is little point adapting applications for Google's Android or any other iPhone competitor. According to Jeff Holden, CEO of Pelago Inc., when he created his social networking company he fully intended to follow the conventional wisdom for how to build a sizable, fast-growing software company: Get your programs on as many platforms and devices as possible. But when he crunched the numbers he came to an interesting business conclusion: The 13 million iPhone owners had already downloaded more applications than the 1.1 billion other cell phone owners! To entrepreneurs, developing a program for the iPhone automatically provides a significantly larger market—almost 94 times larger than its competitors. “Why would I ever build for anything but the iPhone?” Holden asked

Capitalizing on the iPad

Apple's latest release, the iPad, is a lightweight, portable, tablet computer, similar to the iPhone, that allows customers to download applications, check email, and play music all at the touch of a button. Both the iPhone and the iPad can multitask, allowing customers to read a web page while downloading email in the background over wireless networks. The arrival of the iPad brought a simultaneous expansion of the network of accessories. Because the iPad was designed with an exposed screen and without a camera, separate keyboard, memory card slots, or expansion ports, one might say it was specifically built for accessories. Many owners will modify it in some way, whether for mere decoration or hard-core protection. A few of the new accessories include:

- iPad Clear Armor screen protector—\$35.
- iPad Antique book case cover—\$40.
- iPad wireless keyboard—\$99.
- iPad overcoat sleeve—\$35.

- iPad Joule luxury stand—\$130.

Apple has consistently outperformed its key rivals through the development of its MP3 player, the iPod, and continues to make its products smaller and less expensive, while providing complementary features such as games and applications. For the iPhone, Apple developed a unique application called Siri, a voice-activation system that is capable of recognizing voice commands. Siri can perform all kinds of functions from dialing a contact and creating an email to location services such as “Find my Phone,” ensuring lost phones are found quickly.

Apple’s latest offering is a new service called the iCloud. The iCloud has the ability to collect all of the content, including videos, photos, songs, books, etc., from customer devices such as iPods, iPads, and iPhones in one secure location in “the cloud.” Apple customers no longer have to worry about backing up their applications or data because everything is automatically uploaded and stored in the iCloud when using an Apple device. In a fast-paced, technology-driven sector, with competitors quickly following suit, Apple is constantly pressured to develop new products and product extensions. Luckily Apple stays ahead of the pack by focusing on the following key competitive advantages:

- **Customer focus:** Apple is driven by customer satisfaction and ensures customers are deeply involved in product development and application development.
- **Resources and capabilities:** Apple continues to invest heavily in research and development to take advantage of new technologies, improved facilities, and cloud infrastructures.
- **Strategic vision:** Apple has a clear alignment of its vision, mission, and business leadership and goals.
- **Branding:** Apple is the leader in brand loyalty as it has achieved cult status with its authentic product image.
- **Quality focus:** Apple has an outstanding commitment to quality.²⁴

Case Study 2: Vail Ski Resorts Goes High-Tech for High Touch

Vail Ski Resort is the largest single mountain ski resort in the United States, with 5,289 acres of the most diverse and expansive skiing in the world. To its world-class skiing, Vail is also trying to offer world-class customer care—fine dining; spas and ski valets ready to haul, stow, and retrieve your equipment; heated boots; and hand-warming packets. Vail's season pass is a top value industry-wide; its free PEAKS Rewards membership program further inculcates customer loyalty. Members can the most economical lift tickets online, link the PEAKS card to a credit card, and accumulate points that can be redeemed free lift tickets, ski school lessons, and various discounts.

In 2012, Vail Ski Resort installed the fastest, highest capacity gondola in the United States. Seating ten people per cabin, and with an uphill speed of 1200 feet per minute, the state-of-the-art gondola carries 3600 skiers per hour while decreasing ride time from 9 to 7.5 minutes. Heated seats and Wi-Fi access make it one of the world's most customer-friendly ski lifts as well.

Long lift lines have always created a big headache for skiers. In the past, the only way to gauge the flow of the crowd was to ask lift operators or check on bulletin boards at the bottom of the lifts. Now Vail skiers are able to obtain accurate up-to-the minute lift line information by using social networking, streaming alerts, and the resort's own Witter account. Slope congestion can be alleviated by offering special pins or prizes to coax guests to move to a different slope. Guests can be directed to on-mountain dining locations at lunch time.

Vail now uses radio frequency identification (RFID) lift tickets and ski passes. Part of the EpicMix social media program, the tickets and passes are scanned at the base of each lift so that skiers and snowboarders can track how many lifts they ride and the vertical feet ascended each day. The scanned data are automatically transferred to an EpicMix application which can be accessed from either a smartphone or a computer. The basic program is free and confers various pins and virtual awards based on user statistics. For example, you earn the "Connoisseur" pin after 75 lifts and the "Over the Moon" pin when you surpass 350,000 vertical feet skied. After you create your EpicMix account, you can view and share stats by linking to your Facebook and Twitter accounts.

The EpicMix Racing program provides additional fun. At one of six race courses, you can compete against friends and family, all skiers, and even 2010 Olympic women's downhill gold medalist

Lindsey Vonn. At the beginning of each season, the four-time overall World Cup champion establishes a course time for race courses at Vail, Beaver Creek, Breckenridge, Keystone, Heavenly and Northstar. Race pros then ski the courses to establish their "seconds behind Lindsey." "lb factor in changing course conditions, every day one of the race pros skis each course and uses his or her "seconds behind Lindsey" to determine a course time for Vonn on that particular day. When you ski a course, your actual time is automatically recorded and then adjusted for gender, age, and discipline. Snowboarders, telemark skiers, and adaptive skiers with disabilities and special needs can also participate. Scores are computed based on each skier's "seconds behind Lindsey," and gold, silver, and bronze medals are awarded to the top three daily. Race results and leaderboards are accessed on EpicMix.com or the EpicM mobile app, available for Apple and Android smartphones. Your dashboard tallies your Lindsey Vonn Race Series points, EpicMix Racing medals, total number of resort check-ins, total days on a mountain, vertical feet, pins earned, and number of EpicMix photos taken.

The six race course mountains are staffed by 140 professional photographers. Photos are automatically identified and uploaded by scanning the intelligent chip embedded in the skier's lift ticket. Photos can be captioned and shared free on Facebook and Twitter, or you can purchase prints at a number of locations, including, of course, the Children's Ski Schools. You can also purchase a \$30.00 season package for unlimited downloads of all images taken at all locations and print them out later. All of these amenities turn a ski vacation into an "experience" that can be shared with family and friends, increasing emotional attachment and promoting customer retention.

Still, to ensure that it is fully leveraging the wealth of customer data it collects, Vail Ski Resorts' parent company Vail Resorts implemented SAS Customer Intelligence software. Customer data were previously collected and stored in a number of unrelated systems. Now, the data are compiled in a single database that includes all customer points of contact, allowing a complete picture of customer habits and preferences to emerge. Rather than one or two versions of a marketing campaign, Vail Resorts now runs 30 to 50, targeted to specific groups. In the future, the company expects to expand to hundreds or even thousands of personalized, individual communications.

SAS predictive analytics will help Vail Resorts to identify guest motivations and anticipate customer desires, while customer segmentation models identify profitable segments to which they might be steered. Vail Resorts plans to further personalize its engagement with its guests and enrich their mountain experiences before they have even begun.

Case Study 3 : Walmart

With the advent of science and technology, technological innovations have become a pre-requisite to achieve operational and strategic excellence. Organizations by using state-of-the-art systems, are striving for their best to achieve sustainable and long-term competitive advantage. It has become sine qua non to use modern tools for the effective achievement of goals and objectives. Its importance can also be observed from the increased spending on Research & Development in order to pace up with the today's dynamic business environment.

Wal-Mart, founded by Sam Walton in 1962, is the world's largest retailer that employs about 2.1 million associates worldwide, in more than 8,400 stores, including 8, discount stores, 3,100 combination discount and grocery stores. Wal-Mart is serving its customers and members more than 200 million times per week at more than 8,613 retail units under 55 different banners in 15 countries. Wal-Mart has ranked first among retailers in Fortune Magazine's 2010 Most Admired Companies survey with fiscal year 2010 sales of \$405 billion. Sam Walton's belief was to build an empire by providing value to its customers and empowering employees, also known as associates. The way the Wal-Mart operates is so fascinating and impressive that Jack Welch, CEO of General Electric once said: "*Many of our management teams spent time there observing the speed, the bias for action, the utter customer fixation that drives Wal-Mart.*"

The use of high-tech Information technology has always been an essential ingredient for Wal-Mart's growth. Since its inception, it has used the IT systems well enough for the Inventory, administrative, customers and suppliers management.

Wal-Mart's investment in technology started with the computerized accounting systems and since then the continuous adoption of latest technologies has made Wal-Mart a market leader in the whole retail industry.

Wal-Mart developed a well-equipped computerized Point of Sale (POS) system capable of identifying each unit sold, creation of accurate sales receipt and storing all the information item-by-item for sales analysis and inventory reordering purposes. It helped company to avoid overstocking of merchandize through effective information usage and also assisted them in investing in only those merchandize that were profitable. It has also helped them figure out best selling products and prospective products that customers want. Analysts say that it is Wal-Mart's Point of Sale system that has helped them achieve the world's largest market share and revenues in retail industry.

Wal-Mart, in 2004, was the first in retail industry to adopt electronic radio frequency identification (RFID) tags for inventory distribution management. RFID technology, which is still being used, helps them keep track of inventory movement across its supply chain. Wal-Mart was trailing K-Mart in 1980's but with the adoption of latest technologies, it has now become the trend setter in retail industry all over the world.

Wal-Mart is currently working on a project to make best out of wireless technology. In near future, they have plans to develop a remote system that would allow customers to just walk into their store and use their own devices (Phones or PDA's) to get whatever they want. i.e. they might go online to their website, while at the store, and find things for themselves or just compare the products' prices etc.

Customer service, best shopping environment and experience, one-stop shopping, best value products, customer convenience of online shopping, good customer relations are the blessings that Wal-Mart provides using cutting-edge technology. Latest wireless system at their stores, online web-retailing, vast width and hierarchy of product items, and stores at multiple remote sites are the benefits customers of Wal-Mart cherish.

Wal-Mart is considered to be a trend setter in retail industry and it's all due to its inclination towards achieving impossible through modern technology. For example, Wal-Mart once tried to develop three experimental stores in McKinney, Aurora and Las Vegas that were equipped with latest technologies or concepts like wind turbines, photovoltaic solar panels, bio-fuel-capable boilers and water-cooled refrigerators. Irrespective of the criticism it had on environmental issues, Wal-Mart's initiative was considered to be a positive step towards change and innovation and it provided them with an opportunity to become the biggest seller of organic milk and the biggest buyer of organic

cotton in the world, as well as reducing packaging and energy costs. It has been quoted in 2006's annual report of Wal-Mart that in order to compete against upscale and appealing store, such as 'Target', they have launched a new Supercenter concept in Plano, Texas. The new store had wood floors, wider aisles, a sushi bar, a coffee shop with free Wi-Fi Internet access, and more expensive beers, wines and other electronics goods.

By using advance forecasting techniques and integrating different technologies, Wal-Mart is planning to deploy simulation software that would help them simulate business events that are yet to happen.

Wal-Mart has got a strategic plan of introducing a concept of self-service. Self-service technology, aimed at eliminating paper and paper forms, will be provided to their associates, prospective associates, customers and members. It was said by Kevin Turner, CEO of Wal-Mart's subsidiary corporation, in his interview with 'CIO' personnel that "*having an associate portal and devices on our sales floors will let customers and members get product information, and let us do computer-assisted selling*".

For evaluating new technologies, they are always plugged into research and development labs of their key suppliers like Cisco, IBM, NCR, AT&T or HP in order to get current with latest technologies and drive the future for themselves.

Wal-Mart has been outstanding in its investments in Information technology from all prospects. IT systems at Wal-Mart allow them to reduce transactional as well as operational costs at their distribution centers and it has also helped them to support Wal-Mart's long-term strategy of owning the distribution centers and maintaining long-term relationships with their suppliers. Also, improvement in productivity due to IT systems is dramatic at Wal-Mart. It has helped them offer products at such a nominal cost that a small town merchant is unable to provide and this is remarkable achievement of Wal-Mart. It has become a sustainable competitive advantage for them over their competitors and a reason of their growth and profitability. We are aware of a fact that every benefit is accompanied with some problem but Wal-Mart has successfully defied its weaknesses and have used its strength well to take advantage from the prospective opportunities and avoiding possible threats.

Case Study 4: Zappos

Tony Hsieh's first entrepreneurial effort began at the age of 12 when he started his own custom button business. Realizing the importance of advertising, Hsieh began marketing his business to other kids through directories, and soon his profits soared to a few hundred dollars a month. Throughout his adolescence, Hsieh started several businesses, and by the time he was in college he was making money selling pizzas out of his Harvard dorm room. Another entrepreneurial student, Alfred Lin, bought pizzas from Hsieh and resold them by the slice, making a nice profit. Hsieh and Lin quickly became friends. After Harvard, Hsieh founded Link Exchange in 1996, a company that helped small businesses exchange banner ads. A mere two years later, Hsieh sold Link Exchange to Microsoft for \$265 million. Using the profits from the sale, Hsieh and Lin formed a venture capital company that invested in start-up businesses. One investment that caught their attention was Zappos, an online retailer of shoes. Both entrepreneurs viewed the \$40 billion shoe market as an opportunity they could not miss, and in 2000 Hsieh took over as Zappos' CEO with Lin as his chief financial officer.

Today, Zappos is leading its market and offering an enormous selection of more than 90,000 styles of handbags, clothing, and accessories for more than 500 brands. One reason for Zappos' incredible success was Hsieh's decision to use the advertising and marketing budget for customer service, a tactic that would not have worked before the Internet. Zappos' passionate customer service strategy encourages customers to order as many sizes and styles of products as they want, ships them for free, and offers free return shipping. Zappos encourages customer communication, and its call center receives more than 5,000 calls a day with the longest call to date lasting more than four hours. Zappos' extensive inventory is stored in a warehouse in Kentucky right next to a UPS shipping center. Only available stock is listed on the website, and orders as late as 11 p.m. are still guaranteed next-day delivery. To facilitate supplier and partner relationships, Zappos built an extranet that provides its vendors with all kinds of product information, such as items sold, times sold, price, customer, and so on. Armed with these kinds of details, suppliers can quickly change manufacturing schedules to meet demand.

Zappos Culture

Along with valuing its partners and suppliers, Zappos also places a great deal of value on its employee relationships. Zappos employees have fun, and walking through the offices you will see all kinds of things not normally seen in business environments—bottle-cap pyramids, cotton-candy machines, and bouncing balls. Building loyal employee relationships is a critical success factor at Zappos, and to facilitate this relationship the corporate headquarters are located in the same building as the call center (where most employees work) in Las Vegas. All employees receive 100 percent company-paid health insurance along with a daily free lunch.

Of course, the Zappos culture does not work for everyone, and the company pays to find the right employees through “The Offer,” which extends to new employees the option of quitting and receiving payment for time worked plus an additional \$1,000 bonus. Why the \$1,000 bonus for quitting? Zappos management believes that is a small price to pay to find those employees who do not have the sense of commitment Zappos requires. Less than 10 percent of new hires take The Offer.

Zappos’ unique culture stresses the following:

1. Delivering WOW through service
2. Embracing and driving change
3. Creating fun and a little weirdness
4. Being adventurous, creative, and open-minded
5. Pursuing growth and learning
6. Building open and honest relationships with communication
7. Building a positive team and family spirit
8. Doing more with less
9. Being passionate and determined
10. Being humble

Zappos’ Sale to Amazon

Amazon.com purchased Zappos for \$880 million. Zappos employees shared \$40 million in cash and stock, and the Zappos management team remained in place. Having access to Amazon’s world-class warehouses and supply chain is sure to catapult Zappos’ revenues, though many wonder whether the Zappos culture will remain. It’ll be interesting to watch!¹⁹