

BOTSWANA COLLEGE OF DISTANCE AND OPEN LEARNING

In collaboration with

THE COMMONWEALTH OF LEARNING

Commonwealth Executive Masters in Business Administration

Commonwealth Executive Masters in Public Administration

MANAGEMENT INFORMATION SYSTEMS

MI 311

SESSIONAL EXAMINATION

Marks: 100

Duration - 3 hours

INSTRUCTIONS

1. The examination consists of **Two** sections: A and B
 2. Begin each answer to a new question on a new page
 3. Answer questions according to instructions given in each section
 4. Write answers in the answer booklet provided
 5. Write in grammatical English
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SECTION A: Case study question. [40 Marks]

Read the following case study and answer the questions that follow.

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 match its world-class skiing, Vail is also trying to offer the 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, and its free PEAKS Rewards membership program further inculcates customer loyalty. Members can purchase the most economical lift tickets online, link the PEAKS card to a credit card, and accumulate points that can be redeemed for free lift tickets, ski school lessons, and various discounts.

In 2012, Vail Ski Resorts installed the fastest, highest capacity gondola in the United States. Seating ten people per cabin, and with an uphill speed of 1,200 feet per minute, the state-of-the-art gondola carries 3,600 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 lift 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 postings 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 resorts own Twitter account. Slope congestion can be alleviated by



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offering special pins or prizes to coax guests to move to a different slope. Guests can be directed to on-mountain dining locations at lunchtime.

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 that can be accessed from either a smartphone or a computer. The basic program is a 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 for race courses at Vail, Beaver Creek, Breckenridge, Keystone, Heavenly and Northstar. Race pros then ski the courses to establish their “seconds behind Lindsey.” To 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



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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 EpicMix 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 photo taken.

The six racecourse 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 for 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 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



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further personalize its engagement with its guests and enrich their mountain experiences before they have even begun.

Sources: “EpicMix,” snow.com (<http://www.snow.com/epic-pass/pass-benefits/epicmix.aspx>), accessed May 30, 2013; Bill Pennington, “Getting Comfortable With the New Vail,” New York Times, March 1, 2013; “EpicMix FAQ,” epicmix.com (<http://www.epicmix.com/faq.aspx>), accessed May 30, 2013; Spencer Reiss, “Vail Resorts Creates Epic Experiences with Customer Intelligence,” SAS Case Study, March 20, 2013; Lauren Glendenning, “Vail’s New Gondola Lifts Off,” Vail Daily, November 16, 2012; and Nicole Perloth, “Nine Ski Apps to Make the Most of the Mountain,” New York Times, December 26, 2012.

Answer the following questions (1-4) based on the above Case study.

Question 1

Elaborate on the FOUR (4) types of systems given in this case study. **(12 Marks)**

Question 2

Describe how the systems described above improve the operation of the business? **(8 Marks)**

Question 3

Give light into the way the systems described in question one above, support decision-making? Identify three different decisions that can be supported by these systems. **(14 Marks)**

Question 4

Explain two reasons why it is important to improve the guest experience at Vail Mountain Resort? **(6 Marks)**



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SECTION B: Essay-type questions. [60 Marks]

Answer any three (3) questions from this section.

Question 1

- a) Strategic Information Systems Planning (SISP) is essential for organisations to succeed. It is a continuous exercise that enables organisations to develop priorities for information system (IS) development. Analyse any four (4) assumptions of the SISP framework. **(8 Marks)**
- b) Briefly examine any three (3) main features of a Strategic Information Systems (SIS) of your organisation. **(12 Marks)**

Question 2

Discuss any five (5) impacts of the Internet on competitive forces and industry structure and postulate how IT managers can address these impacts. **(20 Marks)**

Question 3

Choppies is considering closing all its brick and mortar shops to be fully an online shop. Discuss five (5) critical success factors Choppies has to consider before closing their brick and mortar shops. **(20 Marks)**

Question 4

“Systems have become very powerful and sophisticated, providing quality information for decisions that enable the firm to coordinate both internally and externally”. With reference to the above statement explain any four (4) expert systems today’s organisations use to aid decision-making. **(20 Marks)**