

BUS 255 – Introduction to Operations and Technology Management
Fall 2013- Assignment 1: Introduction to Information Systems (due September 9 by 8:30 p.m.)

1. For this question, you need to research about the specifications of Personal Computers' hardware and software. Please find specifications of two PCS, one in year 2004 and the other one in year 2013. You are welcome to use any vendors (Dell, HP, Lenovo, etc.) in your search. It's also alright to have two different types of PCs for two different years (For instance, Dell in 2004, HP for 2013). Once you find specifications, analyze them, and discuss the following. You don't have to provide detailed specifications, but only discuss only what is relevant to answering these following questions in a very brief and direct manner. You are also welcome to use MAC systems if you are a fan of Apple. (50 points)

	Dell Inspiron 1000 (2004)	Inspiron 15 Non-Touch (2013)
Processor	Intel Mobile Celeron	Intel® Core™ i3-3227U
RAM	512MB	4GB
Hard Drive	40GB	500GB
Operating System	Windows XP	Windows 8, 64-bit

Sources: (Kyrnin, n.d) & (Dell Computers, 2013).

- a. How the processing speeds have improved? Briefly discuss.
 The Inspiron 15 has a more capable processor. It has a dual core that allows several applications to run all at once. While both processors are used in personal computers with low demands, features such as the dual core, allows for multitasking without high demanding applications interfering with the resources used by one another applications ("Help me choose: Intel® processors", n.d).
- b. Did the size of RAM change? Briefly discuss.
 The size of the RAM in the Inspiron 15 is eight times the size of the RAM in the Inspiron 1000
- c. Did the size of hard drive change? Briefly discuss.
 The size of the hard drive has increased by 460GB. This is not surprising given that the needs for storage have increased significantly since the widespread proliferation of digital photography, mp3, and other large electronic files.
- d. Did the operating system change?
 The standard operating system of these personal computers has changed from Windows XP to Windows 8. According to Informationweek.com, "Windows 8 is the major overhaul of the OS since Windows 98" (McDougall, 2012). Windows 8 offers better user interface that improves customer experience by reducing unnecessary visual overhead, promoting user customization and touch screen capabilities (Microsoft Corp, 2013)
- e. Did the application software change? Briefly discuss about any two horizontal market applications.
 - While the basic functionality of Microsoft office 2003 & Microsoft office 2013 has not changed, the features of each productivity application have evolved to allow better editing options for word documents, analysis capabilities in excel, complex database abilities, office web apps for collaboration, among many others (Microsoft Corp, 2013)
 - Internet security software has experienced extensive changes since 2003, nowadays our information is constantly in cyberspace and frequently exposed to theft. While traditional internet viruses such as Trojan horses, worms, bots, etc., continue to be an issue, the

focus is turning towards the protection of information stored in large public “clouds” and protection of mobile devices. The risks are extensive especially when one considers that a typical mobile device (with several “apps”) has a large amount of personal and financial information stored on it, and that millions of people are resorting to “The Cloud” in order to access their documents from any device at any time (Eagle, 2012).

2. Different industries use different software to manage their business. Research at least 5 different industries and discuss one IT system used in each industry. Provide information in a table format below. One example is provided at the top. (50 points) (Hint: Industries include healthcare, retail, pharmaceuticals, automobile, etc. You are welcome to use any industries you may wish)

Industry	Example of system (name)	What does it do?
Healthcare Industry	Electronic Medical Records (EMR) Specific example: EpicCare (KLAS Enterprises, 2012).	Provides a centralized healthcare record system that allows physician, and other healthcare providers quick access to critical and up to date patient information. KLAS Enterprises, 2012).
Hotel and Resort Industry	Hotel Management Solutions. Specific example: OPERA PMS (MICROS Systems, 2012).	Provides a property management system solution. Among its capabilities, the software keeps track of reservations, daily occupancy, check-in and checkout, as well as guest specific requests. In addition, it provides an effective billing system. (MICROS Systems, 2012).
Banking Industry	Online banking solutions. Specific example: Oracle FLEXCUBE Direct Banking (Oracle Corp, n.d).	The software allows banks to offer personalized online banking to its customers. Some examples of personalization include, spending analysis, customer specific product offerings & alerts system (Oracle Corp, n.d).
Retail Industry	Retail inventory management. Specific example: TAKE's Vendor-Managed Inventory (VMI) (Take Solutions, 2013).	This application allows businesses and their vendors to closely monitor inventory levels. Vendors have access to actual inventory information to make decisions regarding replenishment of products. This guarantees retailers have adequate supply levels at all time (Take Solutions, 2013).
Education Industry	Learning management system. Specific example: Blackboard Learn+ (Blackboard, Inc, 2013).	This software allows educators and students to interact and learn outside the classroom. It provides interactive features to drive collaboration and promote an engaging leaning environment (Blackboard, Inc, 2013).

References

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Honors Pledge:

As a student of the Dr. Robert B. Pamplin Jr. School of Business Administration I have read and strive to uphold the University's Code of Academic Integrity and promote ethical behavior. In doing so, I pledge on my honor that I have not given, received, or used any unauthorized materials or assistance on this examination or assignment. I further pledge that I have not engaged in cheating, forgery, or plagiarism and I have cited all appropriate sources.

Student Signature: 