

Please answer **two** of the following questions, one from Group A and one from Group B. **Limit your answer to 600 words maximum PER QUESTION** (no minimum limit, but I will deduct points if I don't believe your answer is complete or is too shallow.) The thought is that you are writing a one page memo about 500 words is about one page small type (10 pt), single spaced

The two sources you cite (and ***you must cite your sources***) do **not** count toward your word limit; nor does the memo header. Spelling and grammar **does** count (up to 20% of the grade) —you are writing this memo to your boss. Let's presume he was an English major (and has taken ECT424 or IS324).

File Management Instructions: **READ THESE BULLETS CAREFULLY**

- You must turn in this exam as TWO MS-Word readable files on D2L (pdf okay, rtf NOT). This exam is **due 11:30 pm Tuesday, June 9, 2015** (You must submit by this time. I will **NOT** accept email submissions.)
- Note that you are submitting each memo as a separate document in D2L
- Make sure to use correct memo format (with To:, From:, Date:, and Subject: fields – these do not count against the word limit). Be sure to reference your work (you **MUST** provide references, failure to do so will result in my grading STARTING at 80% and going down from there). References do not count in the word limit.
- Be sure that you follow the course standard memo structure (statement of issue, recommendation, background/justification, references), even if the memo request doesn't specifically ask for these. Do NOT use url shortener (I want the full url for all citations)
- You must indicate the question you are answering clearly in the subject line of your memo. *[You'd be surprised; sometimes it is hard to tell which question people are answering if they don't say.]*

It is possible for you to spend 4 hours on this exam. That is not my intention. If you spend more than 4 to 6 solid hours, you have spent too much time on this. Many of you won't even spend that much time.

Page two is context for your answers. It describes a fictional company where you have just been hired. Questions begin on page four. Answer two questions, **one from Group A and one from Group B**. Watch for restrictions based on the other question you answer.

In every case, the answer is in the form of a memo to the character in the story. Make it so.



Ottoman Empire is a growing brick and mortar retailer with just over 150 US stores specializing in upscale furniture and fixtures. OE sells directly to the end user as well as to interior designers; it also has a line of custom built furniture. Ottoman Empire currently does not have (or immediately plan for) a significant online sales presence, although it uses the web for customer support and marketing.

OE's corporate offices are in downtown Chicago, IL. It has seven regional offices and distribution centers in: Manlius, NY, Columbia, SC, Copperas Cove, TX, Lincoln, NE, Medford, OR, Santa Barbara, CA, and Chicago, IL. The company grossed \$395 million in sales last year and netted a \$35 million dollar profit. It is growing at a rate of about twelve percent a year and opening about 10 new stores each year.

Borden Drousy, the CIO, works from the corporate office. Each regional IT staff is run by a Technical Director. So there are seven IT centers with the Chicago operation doing corporate support as well as regional operations. The IT centers are connected by rented T3 lines back to Chicago. Each of the 150 stores has a T1 line into its regional center. Chicago is running an open source ERP system called ERPNext. Right now ERPNext is housed primarily in Chicago (on-premise) and distributed out to the data centers and retail stores via the leased lines.

In addition, OE manages its email using an MS-Exchange product hosted in Chicago, and has rolled out MS-Office w/MS-SharePoint as its officing solution. MS-Exchange and the OE website are hosted on three load-balanced in-house servers in the corporate data center. ERPNext runs on an 8 core application server with mirrored onsite backup. There are fifteen IT staff people in the corporate office (development, ERPNext maintenance, computer operations, and staff tech support) and an average of five in each regional office (the number due largely to travel demands among regional staff to visit retail stores for repair, maintenance, and upgrade of hardware, and software.)

You have just finished your MS at DePaul University and have been hired onto the corporate staff as an IT Analyst reporting to the CIO. Your responsibilities are to analyze, evaluate, and execute plans for modernizing the IT infrastructure in a way that will support growth of the company toward doubling its current size over the next ten years.

What follows are a series of memos from the CIO (and others) to you. CIO Drousy and his friends like to receive back single page memos (about 500 words) that clearly and concisely lay out issues for them. They don't like being told basics they already know; and they don't like to read a lot of extra fluff. But they do want meaty information. Borden permits his staff to provide background sources and citations outside of the 500 words so he knows where to turn if he wants to dig deeper. Oh, and one of his mottos is: "I can read Wikipedia myself! Tell me something I don't know." The word count is measured by Word (which includes everything so I will give you UPTO 600 words, after which, I stop reading!). Word count trumps page count.

When he issues a research memo, he expects a clean, clear, and complete response within the week.

There is a pool of ten memos in his hopper right now. Pick two of them (**one from Group A, one from Group B**) and develop some answers for Borden and his friends.

Question A1.

From: Donatello Nobatti, Technical Director

To: You

Re: On the sly

Lotta B. Essen, our MicroSoft sales rep has been pushing unified communications solutions and telling me that BYOD is the next big wave. I'm not convinced but don't have enough information. What are the considerations (pro and con) for moving forward with a BYOD plan (what are the best practices in developing a policy or do we just do chaos)? What are other firms doing to get this beast under control? Can you give me a memo on this?

Question A2.

From: Ima Hacker, Chief Security Officer

To: You

Re: Lost in the clouds?

I am up in arms that we might be considering changing our enterprise architecture by moving our systems from our site to a commercial cloud vendor. Now that I've brought it up, Borden wants background (he knows what cloud computing is).

Can you draft me a memo that lays out the **security trade-offs** among our current site architecture and the principle cloud options we might consider?

Question A3.

From: Candace B. Rittenoff, Chief Financial Officer

To: You

Re: Money for nothing?

I am wondering why we are paying six figures to Microsoft each year when there are open source alternatives to Exchange Server and MS-Office.

What are the trade-offs between open source and commercial officing software? Is open source actually free? If not, how do we cost it against commercial software? What factors other than price should we be considering? Memo, please.

Question A4.

From: Ed Amame, Chief Accountant

To: You

Re: Can you hear me now?

Even though we are running T1 and T3 lines among all of our offices and stores, our corporate voice phone bill from AT&T is in low six figures a month. Is AT&T providing us with something we can't do ourselves? Are there lower cost IP Telephony (VOIP) options for us to consider? Are there considerations we need to factor in other than price? Can you get me a one pager on this? (**NOTE:** I don't want to change the WAN configuration, just the voice phone bill.)

Question A5.

From: Otto DeLupe, Chief Marketing Officer

To: You

Re: Face time or Facebook?

I think we should be doing more with Social Media. We have a website and Facebook page, what else should we be doing to connect with our customers? What I really need to know is what you recommend for developing a **social media strategy**? Are there any downsides to getting more involved? Can you give me a page on this?

PART B

Question B1. (you may not choose this if you did A2)

From: Orson Buggy, PC Support Manager

To: You

Re: On to something, or just a lot of SaaS?

I think we should be moving everything to the cloud. I have been pitching Borden Drousy lately on PaaS, IaaS, and SaaS. Given the cyclical nature of our business, should we be moving our ERP or MS-Officing systems to one of these? What criteria will determine which of these architectures, if any, is a better fit for us?

I'd like a memo, but mind you I am not looking for a **solution** recommendation here—rather a sense of the **recommended method and criteria** for figuring this out.

Question B2 (you may not choose this if you did A5)

From: Bjorn A. Payne Diaz, Marketing Director

To: You

Re: It's life, but not as we know it

I want to launch a major social media campaign using Facebook, Twitter, and several other web properties.

What IT infrastructure will we need to support it (consider increased web traffic, phone calls and anything else you can come up with)? What in-house technology implications (and related overhead costs) might this campaign have? How do we go about evaluating IT costs for this as part of establishing a business case for my campaign proposal? Can you get me a memo on this?

Question B3. (you may not choose this if you did A3)

From: Noah Vale, Exchange Server Manager

To: You

Re: You've got mail! (and maybe a little virus too)

Independent of Candace's questions (see A3), I have been complaining to Borden about spam and viruses, and other DoS² attacks into our systems. I am spending way too much of my time troubleshooting problems that don't deal directly with advancing our business operations. I've got him thinking: perhaps we do need to move our email environments to a Web2.0 SaaS solution from our current Exchange Server solution.

I want to make the case but need to know: what questions do we need to ask? How do we go about making the evaluation between hosting an Exchange server ourselves and offloading email to a hosted solution? Is there a third option we should consider along with this?

Question B4.

From: Nick F. Thyme

To: You

Re: It's just like being there, only better

I am developing a business case for using collaboration technologies to hold virtual meetings rather than have our corporate staff fly all over the country to regional offices. I believe virtual meetings can save us into six figures in travel costs each year.

Help me prove I'm right and that it is this simple (virtual collaboration **is** this simple, isn't it?). What kind of technology infrastructure (hardware and software) do we need in place to run effective virtual meetings? **How will we know what to buy?** How will we know how to implement this? Are there other, **non-technology issues** to consider? Will these meetings be just as good as sending our executives on a plane (Leading a virtual meeting is just like leading a face-to-face meeting, right)?

What does Borden need to know in order to evaluate my proposal?

² DoS = denial of service

Question B5. (you may not choose this if you did A1)

From: Borden Drousy

To: You

Re: The naked truth

I had to work from home last week and found I was very productive (even though I could only get to the webmail application – what is this VPN thing I hear about?). I am thinking about permitting several of our IT staff people (keep this between us for the time being) to telecommute on a periodic basis. I am separately researching policy and HR implications of telecommuting. What I'd like you to find out for me (and report via memo) is: **what are our IT infrastructure implications for VPN?** (mind you I don't want a complete redesign of our WAN just the parts to support telecommuting to HQ).

Do we save infrastructure money if some of our staff periodically telecommute? Or, will this cost us money? What if we have them telecommute all the time? Do we require any new or different infrastructure than we currently have in place? Are there security issues? How do we cost out infrastructure implications for a telecommuting project?

Can you get me a memo on this?