

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMUNICATION AND INFORMATION SCIENCE

BACHELOR OF SCIENCE HONOURS DEGREE IN RECORDS AND ARCHIVES MANAGEMENT

PART I SECOND SEMESTER JULY 2007 SUPPLEMENTAY EXAMINATIONS

ILI 1204 APPLICATION OF INFORMATION TECHNOLOGY TOOLS IN LIBRARIES AND ARCHIVES

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. ANSWER **THREE** QUESTIONS FROM THE FOLLOWING:
2. SECTION A IS COMPULSORY
3. SECTION A, QUESTION 1 CARRIES **60 MARKS**
4. ANSWER ANY **TWO** QUESTIONS FROM SECTION B
5. EACH QUESTION IN SECTION B CARRIES **20 MARKS**

SECTION A

QUESTION 1: CASE APPLICATION

J.P. MORGAN COMBINES INTRANET AND NOTES¹

J. P. Morgan Co. takes pride in its ability to break new ground, whether its making inroads into emerging global financial markets or galloping into the promising world of intranets. In one of the most aggressive corporate-wide intranet deployments yet, the mammoth financial institution, with more than \$184 billion in assets, is outfitting every one of its 15,613 employees in 30 countries with Web browsers for accessing its raft of new Web-based applications. Having embarked on one of the largest corporate-wide implementations of Lotus Development Corp.'s Notes, J.P Morgan continues to seek ways to combine existing secure groupware applications with new Web programs. Its goal: to simplify access to crucial corporate database resources that reside on disparate platforms and networks, while providing the ability to consolidate that information policy quickly.

Obstacles to Overcome

Securing integrated information has been a particular challenge for New York based Morgan, whose infrastructure comprises a global TCP/IP network with 600 Novell NetWare LANs and Sybase Inc. databases on Unix servers: a small IBM SNA network with financial applications and DB/2 databases on mainframes: a company-wide Lotus Notes network with more than 250Notes servers and 2,000 Notes unstructured databases; and a variety of E-mail systems. Even though most of its desktops use Microsoft Windows and Office Suite, others run different versions of Unix, and still others support Apple Computer In.'s Macintosh. As a result, users not only have to switch among programs to access information, they also have to use different user interfaces.

“Intranets have a ubiquitous [browser] front end that helps us consolidate, deliver and as a result, improve information flow across our enterprise,” says Donna Larsen, corporate vice president and product manager for Internet/Intranet services. Larsen says Morgan provides financial services and

integrated information to more than 300 institutions worldwide. According to Larsen, the company expects to complete the browser deployment, by December 1997. With just 4,000 users armed with browsers, Morgan has already seen ample evidence of the program's popularity and success. The company records, on average, a half-million hits daily on its intranet Web servers.

In the 1990s, while many in the networking community were still weighing the pros and cons of groupware, Morgan equipped its employees with Notes. Now, Morgan again is leading the networking community, retaining the workflow, security and replication capabilities of its Notes servers, but using browsers to access information. In fact, Morgan is combining the local caching capability of Web servers with the selective replication of Notes to track only changed information, thus eliminating traffic bottlenecks.

Morgan's intranet initiative has several components. An internal corporate home page for standard information sharing serves as a combination of daily corporate newspaper, companywide phone book and suggestion box. A separate intranet ties nearly 3,000 IS, development and networking employees to the rest of the company, giving everyone access to details about every desktop and networking device. And, most important, several intranet applications in Morgan's business units speed up responses to clients.

How the Tools Are Used

Among those business units, one that deals in financial derivatives, credits and market information has taken the lead in a venture code-named "Research Distribution System." Jeanne Feldhusen, managing director at J.P. Morgan Securities Inc., says that sales, trading and client support for Morgan's full range of financial products and services are all offered via intranet. "Our goal is to increase the efficiency of the sales staff so they can focus on decision-making rather than on transfer of information, and thus, increase communications with clients," Feldhusen says. In other words, the 2,000 Morgan employees who provide information on securities, portfolios, markets, interest rates and trends to salespeople, traders, and clients use the browser and in-house Web tools for instant access to different Sybase and Notes databases in real time. Thus, Notes can make the knowledge of many experts available to decision makers quickly (see DSS in Action 9.1).

The research information is then tailored for sales forces and their specific clients. Nearly 700 documents are updated daily, and the system tracks usage of the research information by potential clients. A value-added feature further lets sales and trading staff identify, and sign up, new clients from among those who have browsers. Moreover, the Web tools help Morgan's research and support staff consolidate information to create specific profiles on clients. For instance, sales agents can program their tools to send clients specific information on portfolios and investments.

Morgan plans to use agent technology next year to create tailored intranet applications for particular clients. Then it will provide specific recommendations on bonds and other investments. Feldhusen says Morgan also is kicking off intranet applications for its emerging-market and foreign exchange units. Already, Morgan's staff uses the Internet/intranet to track global business deals in developing countries.

Anthony Devito, vice president of Internet/intranet technologies at Morgan, says the company uses six Web servers along with Netscape Communications' Navigator. Morgan is evaluating Lotus' Domino Web server and browser technologies as a way to link its Notes servers with Web technology. Morgan also is moving toward standardizing Notes mail for corporate-wide E-mail. But, in an interesting twist, the company is considering moving all users to Microsoft's Windows NT desktop system.

Refuses to Be Limited

If all these moves seem chaotic, Larsen maintains that there is a method to the company's information strategy: Morgan refuses to lock itself into any proprietary or limiting solution. The company builds

its Web applications using Sun Microsystems' Java Internet-programming script and applets. Though it now uses the Navigator Web browser, it hasn't ruled out the Notes browser or Microsoft's Explorer – in keeping with Morgan's plan to revisit and evaluate all its technologies every six months. "We want our architecture to incorporate the best of breed and embrace the plug-and-play philosophy," says Larsen, 'so that as new products and applications emerge, we can deploy them quickly.'

SOURCE:

Turban, E & Aronson, J. 1998. Decision Support Systems and Intelligent Systems. Prentice Hall International Inc. New Jersey

QUESTION 1 – SECTION A

1. What is the goal of the groupware applications at J.P Morgan? **[10 marks]**

2. What is the potential impact of giving all employees access to the Web-based applications? **[10 marks]**

3. How was J. P. Morgan able to integrate Lotus Notes with its Web-based strategy? Why was this a good idea? **[10 marks]**

4. Relate the J. P. Morgan applications to the Price Waterhouse activities described in DSS in Action 9.1. **[10 marks]**

5. How can using Web browser technology bypass many hardware and software integration problems when setting up groupware? **[10 marks]**

6. How are the tools being used? Do these applications fit the mold for collaborative technology use? How or how not? **[10 marks]**

SECTION B:

2. Why is the Internet important in Libraries and Archives? **[20 marks]**

3. Explain the four main program tags used in HTML and compare the use of HTML in Webpage designing to using front page. **[20 marks]**

4. What issues in information technology tools and applications should be addressed by information managers in today's information management industry? **[20 marks]**

5. What factors would you consider in designing a website for an information company of your choice? **[20 marks]**

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