



MBA II Semester Supplementary Examinations June/July 2018

**MANAGEMENT INFORMATION SYSTEM**

(For students admitted in 2014, 2015 & 2016 only)

Time: 3 hours

Max. Marks: 60

**SECTION – A**

(Answer the following: (05 X 10 = 50 Marks))

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- 1 What do you mean by system? What are the various elements of system?  
**OR**
- 2 What do you understand by the term MIS? How does it assist managers in their day-to-day functioning?
- 3 Explain the different types of management information system from a management activity point of view.  
**OR**
- 4 How can the structure of MIS be understood? Discuss the various approaches to understand its structure.
- 5 Explain the phases of software development life cycle with examples.  
**OR**
- 6 List out the pros and cons of data base management system.
- 7 As a system manager how will you evaluate the hardware and software for new information system in your organization?  
**OR**
- 8 What are the various factors that influence the outcome of the implementation?
- 9 Why is there a need for control and audit of computer systems?  
**OR**
- 10 Explain the importance of software engineering in ERP.

**SECTION – B**

(Compulsory question, 01 X 10 = 10 Marks)

11 **Case Study:**

**BAE Systems: The Benefits of AI in Knowledge Management Systems:**

It's one of those blue-sky goals to which many big companies only aspire: capturing the seemingly infinite amount of intellectual capital that's carried by tens of thousands of employees around the world and using it to achieve competitive advantage. But it's a flight that's well under way at London-based BAE Systems PLC ([www.baesystems.com](http://www.baesystems.com)), formerly British Aerospace, which is getting solid returns on a knowledge management intranet-based system. Thousands of BAE engineers scattered across five continents in 100 offices are using the system to search for information that may be vital to big initiatives and to identify and eliminate redundant project work.

Like other far-flung multinationals, the \$20 billion-plus aerospace and engineering giant suspected that its engineers and other workers might be wasting a lot of time searching for information scattered across the enterprise. So in early 1999, BAE Systems invested roughly \$150,000 to study its global operations to see whether "we had the right information to support decision-making processes and if people had the right learning systems to help them support their day-to-day jobs," says Richard West, BAE's organizational and e-learning manager in Farnborough, England.

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The results, says West, "Were certainly eye-opening." BAE systems discovered that nearly two-thirds of its top 120 decision makers didn't have the right information at key stages. The company also found that 80 percent of employees were "wasting" an average of 30 minutes each day trying to find the information they needed to do their jobs. Another 60 percent were spending an hour or more duplicating the work of others.

"In an organization as massive as BAE systems, we seemed to be working in silos where we didn't seem to know what was going on elsewhere," says West. One of the problems BAE systems officials discovered through the study was information overload on its intranets. The information itself was often unstructured and the search engines were inadequate for conducting keyword searches to find information, says West. The company decided to test two or three of the top intranet search engines over three months and compare their ability to find information, says West.

One of the search engines BAE systems tested was from San Francisco-based Autonomy Corp. The Autonomy search engine uses advanced pattern matching, intelligent agents and other artificial intelligence (AI) technologies who's "ability to retrieve information was second to none," says West. What sold BAE Systems on Autonomy's AI-based technology was its ability to flag whether other people in the organization are searching against similar information and, perhaps, working on common problems.

That kind of matching identification helped the Autonomy system pay for itself just seven months after it was installed in late 1999. One of the system's first big payoffs came soon after, when two disparate groups of engineers in the U.K were working on wing construction issues for the company's Harrier 2 military aircraft. After using the Autonomy system to search for wing specification information across the company's intranet, one of the engineering groups discovered that the other group was working on the same problem. Catching the redundancy early in the cycle helped save the company millions, which ultimately paid for the licensing and maintenance of the Autonomy search engine, says West. He declined to say how much BAE systems paid for the search engine.

A year into using the Autonomy search engine, BAE systems evaluated its performance and determined that it was able to reduce the time needed to retrieve information from its intranet by 90 percent. Christopher Tree, a systems engineer in Farnborough and one of 20,000 regular users of the search engine, says it is "helping me do my day-to-day job." For instance, the central IT organization at BAE systems is conducting a software capability maturity model audit. Throughout its global offices over the next several weeks, Tree plans to use the software to "determine where the audit has taken place before and assist me in preparing for it," he says.

One of the features Tree likes best about the search engine is its ability to "scan the network and draw upon that information" so he doesn't have to log in and send engineering or project information into the portal himself. Using previous search engines on the company's intranet, Tree says, it would often take seven days out of a month long project to search for and find best practices information. Using the Autonomy system's matching identification capabilities, "I can now literally find a name and contact information within minutes," he says. In fact, because it took so long to find that kind of information before, Tree says he rarely invested the time to do the research. The upshot was that a lot of BAE's intellectual capital was never tapped. For a knowledge management portal to succeed, "it's got to form part of an information sharing process with measurable benefits," says West. "You can have a whiz-bang solution, but if you say, 'Here's a great search engine; use it if you want to,' will they come? Not likely.

**Questions:**

- What problems was BAE having in knowledge sharing? Are such problems common to many companies? Why or why not?
- How BAE's knowledge management system does help to solve such problems?

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