



Indian Institute of Management Kozhikode

Repeat Examination-2008 eMEP

Subject: Corporate Information Management
Maximum Marks: 50

Duration: 90 minutes

Instructions:

- Answer all questions.
- This question set consists of four cases followed by a few questions, those you have to answer.
- Answer should be precise and to the point.

Q. No. 1. Case 1:

As in most U.S. states, Georgia does not mandate how its courts organize their data. Consequently, the design of databases varies from courthouse to courthouse. This posed a considerable challenge to Jorge Basto, the director of technology at the Georgia Administrative Office of the Courts. Basto is working to implement a statewide business intelligence (BI) system for the approximately 1,000 state courts, most of which have different databases, case management applications, and reporting tools.

To consolidate the disparate systems, he first needed to define a unique identifier, a primary key, for each record across all databases. Basto explains, "Our first step is trying to find commonalities, like find a specific, unique identifier for an offender." Basto has the ambitious goal of finishing the new system, to be called Judicial Intelligence, within a year. He selected software from the Business Objects Corporation as the core of the new system. The Business Objects software will give Georgia's judiciary a single reporting, query and analysis tool layered over existing applications.

BI systems include many of the database tools and management systems discussed in this chapter such as online analytical processing (OLAP), data mining, standardized reports, custom report generation, end-user querying, visual analysis tools, and executive dashboards and scorecard functions, which are used for tracking key performance metrics. BI can also include extract, transform, and load tools for moving data into a data warehouse, and integration adapters for connecting directly to an application or database. Generally, though, BI offerings fall into one of two distinct categories: data mining and analysis or business reporting.

Basto expects that the new Judicial Intelligence system will revolutionize the Georgia courts. "There are seven levels of courts, numerous court-related agencies and offices, as well as several executive and legislative agencies that could use this information," he explains. The system will be used by court administrators to dictate case loads. "They could pull statewide case-load statistics, for instance, and analyze them in order to make a case for adding more judges," Basto says.

A single database management system doesn't always satisfy everyone's needs and desires in a large dispersed organization. "In general, standardizing on a single BI platform is a good idea," says Kurt Schlegel, an analyst at Stamford, Connecticut-based Gartner Inc. "However, few organizations have actually done it. Most are hampered by the political realities of replacing a tool from existing projects. all



in the name of „standardization.“ According to surveys conducted by Forrester Research, Inc., in Cambridge, Massachusetts, most large organizations have between 5 and 15 different reporting and analysis tools. Consolidating means "taking away those technologies that users feel are most appropriate for their tasks," says Keith Gile, an analyst at Forrester.

However, implementing a consolidated, centralized BI system can be cost-effective. "With a single platform, you can take advantage of <aching and clustering [and] blade technology," says Gile. "There really is an economy of scale to managing one BI environment." Consolidation can also provide business users with access to more advanced reporting and querying capabilities and give executives a better view of up-to-date operational data via user-friendly dashboards. "Organizations want a 360-degree view of their customers, employees, and processes-and usually they have to pull that from multiple databases," says Eric Rogge, vice president and research director at Ventana Research, Inc., a business performance management consulting firm in San Mateo, California.

Jorge Basto is unique in his attempt to bring cutting-edge business intelligence technologies to state court information systems. Many in the field consider him brave to be attempting to change the way the court systems operate when so many in the system are content with what they already have. If successful, the Georgia state court system could be the most integrated and organized state court system in the country.

Questions

1. Considering the challenges of updating a state court system, describe the challenges that would face the federal government in implementing a similar system across the federal court system.
2. If you were Jorge Basto, how would you sell the individual state courts on the value of a new system?

Q. No. 2. Case 2:

The goal of an effective management information system [MIS] is to improve a company's business processes. A business process is a set of coordinated tasks and activities that people and equipment perform to accomplish a specific organizational goal. Working to make business processes more effective and more capable of adapting to an ever-changing environment is commonly referred to as business process management [BPM]. MISs are at the core of BPM. A poorly designed MIS leads to problems with business processes.

The American National Insurance Company had a problem with its MISs and business processes in its customer service department. The company uses many legacy management information systems. When a customer phones the company asking for information regarding a policy, a customer service representative needs 10 or 11 minutes to find the required information stored in several systems. The rep needs to drill down into one system for part of the answer, log out, drill down into the next system, and so on until the full answer is assembled. In the mean time, the rep needs to keep the customer informed during the wait.

American National hired Pegasystems to develop an MIS to link all of its legacy systems. Pegasystems business process specialists studied the types of queries the customer service reps made and developed process models that covered the most common customer requests. Then they designed a



properly modeled and easy-to-use system to automate the collection of data from the legacy systems.

Today, when American National reps field calls from customers, they enter the customer ID into the system, select the information requested from menus and wizards provided by a custom interface, and typically have the desired information within 15 seconds. "Depending on what the customer asks for, different business rules are enacted that take the customer service rep down different paths," says Gary Kirkham, vice president and director of planning and support at American National.

The new system has satisfied the company's primary goal: to put the customer service rep in a position to help the customer as quickly as possible. Now the company is working on its secondary goal: to optimize and automate business processes. For example, when a customer dies, it used to require an effort from three American National Insurance employees to handle the paperwork and business processes to manage the life insurance claim. These processes have been optimized and automated. "Once Pegasystems knows an insured has expired, it processes automatically all the things three people used to do," Kirkham says.

Kirkham stated that the new system has increased sales in its annuity division from \$750 million to \$2.2 billion two years in a row. He credited the increase to the ability to keep customers happy and to use the system to identify callers who will produce the most sales and providing those clients with the priority they deserve.

Questions

1. How do you think American National found itself with information systems that were so difficult to navigate?
2. Based on what you have learned throughout this book. What would you suggest as an alternative but much more costly solution to American National's dilemma [rather than the one provided by Pegasystems]?

Q. No. 3. Case 3:

The International Manufacturing Corporation (IMCI), with 3,000 employees worldwide, is a supplier of automotive parts and is headquartered in the United States. Given the increasing market pressure and the need to operate internationally, IMC has recently made three acquisitions. The acquisition of one company in Great Britain and two companies in Germany is expected to leverage the companies' complementary manufacturing and sales capabilities to gain a stronger market presence in North America and Europe. The subsidiaries are still managed by their former management teams, who are now reporting to the U.S. headquarters. Each of the subsidiaries still operates its own management information system because the system fulfilled the requirements in the past and at the time of the acquisition there was no visible benefit to change what was working. A couple of interfaces were created to facilitate the monthly financial reporting to the headquarters.

Recently, the CIO of IMC realized some disadvantages of the diversity of hardware and software platforms. When one IT expert from one German subsidiary terminated her employment, no other IT expert within IMC had detailed knowledge of the local system, which threatened regular operations in that plant. The company needed to seek external consulting support to maintain the system until a new



IT expert could be hired. This dependency on individual experts in each location was expensive and caused problems during periods when the experts were on leave. In addition, the interfaces between the subsidiaries' systems and the headquarters' system that were created right after the acquisition had to be modified whenever a change or upgrade was made to one of the subsidiary systems. Even minor changes, such as the reorganization of product codes or sales organizations, required reprogramming, maintenance of conversion tables, and subsequent testing of the related business processes in the system. The IT departments worked overtime and still did not find the time to invest in new initiatives such as enabling mobile computing for the sales force and developing a strategic enterprise management system that would allow consolidated planning and monitoring of all key performance indicators for the organization, a project long requested by the CEO. The two German subsidiaries had recently upgraded their systems, and problems identified during the testing of the interfaces could not be corrected in time for the submission of the monthly reports to headquarters. The data was finally corrected, but the monthly reporting was several days late. This was not the first time that the monthly financial reporting had been delayed or that the data needed to be corrected because of system-related problems, which caused other problems at headquarters.

The CEO finally requested consolidation of the systems in the coming year to allow for an integrated strategic enterprise management system that would provide current information from all legal entities and support a consolidated budgeting and planning process.

He compared the company's current system to the cockpit of an airplane and stated that "no one would expect a pilot to fly an airplane with malfunctioning instruments; hence nobody can expect management to run a company based on incomplete or incorrect information." The CIA was asked to develop a business case for the implementation of such a system, considering the savings from personnel, hardware, and software, as well as process improvements.

After IMC's board approved the business case to implement enterprise resource planning (ERP) software from SAP, the CIO established a project in January 1999. The project schedule called for completion of the financial, human resource, supply chain management, and customer relationship management functions for the complete organization-called the Big Bang-in January 2000. A prototype of the application was planned to be ready by July 1999 so that the departments could test all functionality with a set of converted data extracted from the current systems. The plan also called for complete conversion of live data by the end of November 1999 so that in December both the current system and the new system could be used in parallel before making the decision to switch systems. Consultants from SAP were hired to support the implementation - for project management and configuration of the system-and an independent training organization was charged with planning the end-user training and developing computer based training (CBT) programs for ongoing use. The project plan allowed for hiring temporary staff to help with the cutover and redundant data entry in December 1999.

The project started with a kickoff meeting in February, after which nearly all team members began their project work. The complete prototype of the application could only be made available in September because some of the team members had to fulfill their regular jobs while providing their expertise to the project. Some of the early project decisions had to be revised to accommodate the best-practice business model from IMC, after the IMC team members better understood how the SAP system worked and the consultants had gained a better understanding of how IMC wanted to operate. The CIO still



wanted to maintain the timeline and called weekly meetings of the project's team leaders for finance, human resources, supply chain management, and customer relationship management. Those meetings led to the decision to delay rollout of some of the functionality and to reduce the functionality to what was really needed (eliminating nice-to-have functionality). The prototype testing produced additional feedback from the departments that needed to be incorporated in the design of the final solution prior to the conversion. Many of the department heads, who had not been part of the core project team, only then became aware of the changes and started to talk about the new software, saying that it was not working properly yet and some of the team members were scared they would not make the deadline. In November, the data conversion revealed some additional problems [e.g., with data-entry errors made by the temporary staff who were keying data into the new system in instances in which an automated conversion was not cost-effective). As a result, the parallel use of the current and new system, which depended on all data being available, was delayed. To add to the pressure, the CIO believed that delaying the project's completion could be perceived as his failure. The CIO and steering committee of the project needed to make a decision on how to move forward: (a) Continue with the project's completion in January 2000 as planned or (b) delay conversion to the new system until a proper parallel test could be completed.

Questions

1. Which tasks would you consider when developing the original project plan for the implementation?
2. Given IMC's current situation, what would you decide if you were the CIO?

Q. No. 4. Case 4:

Discovery Communications, Inc. [DCI] is the leading global real-world media and entertainment company. DCI presents real-world content through documentaries and television programs over the Discovery Channel and many other network brands in 160 countries and 35 languages. DCI's unique brand of programming has been combining education with entertainment since 1985.

Like all global corporations, DCI works hard to distribute mission-critical information and materials to its 5,000-person global workforce. Unknown to most television viewers, each program produced involves a significant amount of legal and strategic paperwork; on average, this amounts to a six-inch stack of production documents for every program. The paperwork assists DCI in maintaining production lifecycles and articulating the legal rights of ownership. Creating and accessing these documents was a cumbersome and tedious chore for DCI personnel. The documents were stored at various locations, which made searches for documents time consuming. Once located, it was difficult to tell if the document was current and up to date. DCI needed a system that would allow employees at any location to access up-to-date production documents for its programs without any time delay.

This type of business problem falls under the information system heading of knowledge management. Knowledge management, or KM, is a term used to identify systems that collect, transfer, secure, and manage knowledge in terms of resources, documents, and people skills within an organization. Successful knowledge management systems help an organization make the best use of that knowledge. DCI required a special type of KM system that focused on document management. Fortunately for them, KM is popular in industry today and many companies were eager to provide a solution for DCI's problem.



DCI worked with Carefree Technologies [an IBM partner company acquired by Integro, Inc.) for their document management system. Carefree Technologies turned to IBM's Lotus Domino Document Manager system, a document management solution that would centralize and streamline the process of document creation, filing, management, and retrieval. Carefree Technologies and DCI agreed on IBM's WebSphere Portal as the primary user interface for the document management system. As the name implies, WebSphere would act as a Web-based interface to the database of documents and allow Carefree Technology's development team to customize the system for DCI's needs. A portal is an application that provides access to a commonly used information system and communication tools from one central interface, typically a Web page.

Carefree Technology's developers found it easy to merge the document management system with other portal services such as news, information, and communications tools. The final product goes beyond the original hopes and expectations for the system. The portal helps employees track and manage the television production process and easily find the documents they need. In addition, employees can utilize links to external Web sites and a news service from LexisNexis to keep abreast of the latest trends in the television industry. Through the integration and customization of IBM's systems, Carefree Technologies and DCI's IT staff have enhanced its portal by integrating it with other business tools, instant messaging, and Web conferencing to further enhance productivity levels.

Questions

1. Why do you think knowledge management is so popular today? What advantages can it provide a company?
2. What were the most important steps in organizing the millions of documents in DCI's systems? Why?

----- GOOD LUCK -----