Pre-requisites: ACCY231
Credit points: 6

Subject Description

To maintain competitiveness in the global electronic market-space organizations need to ensure that their information system and business strategies are aligned. The greatest impediment to this strategic alignment is the inability of technical and non-technical management to effectively communicate.

Systems Analysis and Design in Accounting and Finance provides future business managers with the necessary skills to effectively communicate with Information Technology specialists. These skills are developed through the examination of the analysis and design techniques of Entity Relationship (ER) and Resource Event Agent (REA) modeling, in conjunction with an overview of Enterprise Resource Planning Systems (ERP) and Electronic Commerce (e-commerce) implementation issues. In addition to a generic examination of ERP, students will also work through a series of e-commerce computer exercises utilising SAP.
Subject Objectives

On successful completion of this subject, students should:

- Be familiar with the commonly used documentation techniques used for representing manual and computer based systems.
- Understand the conceptual, logical and physical operational aspects of data-base design.
- Be able to develop Entity Relationship (ER) models for the purpose of identifying key relationships between internal and external elements of a business system.
- Be able to develop Resource-Event Agent (REA) accounting models and understand the use of these models for data-base design and process re-engineering.
- Understand the key features of generic Enterprise Resource Planning (ERP) systems.
- Be cognizant of the need for alignment between business and information system strategies in order to achieve a sustainable competitive advantage.
- Be aware of the potential exposures and risks inherent in ERP and e-commerce environments.
- Have an understanding of the system development process and the controls and checks necessary for successful information system implementation.

Subject Coordinator and Lecturer

Mr Phil Venables
Building 40, Room 347,  Telephone  02 4221 5376
Email: venables@uow.edu.au

Consultation times:

Tuesday       13:30 – 14:30
Wednesday     14:30 – 16:30
Thursday      11:30 – 12:30

Student Administration

Telephone                  02 4221 3938
Facsimile                 02 4221 4322
Email                     studeng@uow.edu.au

Library

Telephone                  02 4221 3548
Web                        http://www-library.uow.edu.au
Seminars and Computer Laboratories

The seminar will be held in two parts, an introductory lecture, followed by student presentations and discussion and/or set exercises or review questions. The lecture will provide the focus for introduction of new material. The presentations will be based on a relevant paper to be allocated in seminars two weeks prior to the presentation date. Class discussion of issues arising from the presentation will be lead by the presenting student. It is expected that students will find supporting articles for their presentation. The week following the presentation, the presenting student will submit a detailed précis and critique of their assigned article. Issues discussed in the presentation should aid in the critique. All students not presenting will hand in a brief review of the paper being presented at the beginning of each session (see appendix 1). It is expected that all students will be familiar with the material in order to contribute effectively to the discussion.

The computer laboratory (teaching weeks 5 – 9) will enable students to work through a series of integrated e-commerce demonstration exercises utilising SAP. Students will then complete additional exercises (similar to the demonstration material) for submission and assessment.

<table>
<thead>
<tr>
<th>Seminar Times</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday</td>
<td></td>
</tr>
<tr>
<td>10:30 – 12:30</td>
<td>40.123</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Laboratory Times</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday</td>
<td></td>
</tr>
<tr>
<td>9:30 – 10:00</td>
<td>Lab 5</td>
</tr>
</tbody>
</table>

Study Time

This subject carries 6 credit points. The university has determined that each credit point translates into approximately 2 hours per week, including contact hours. This indicates that you should be committing 9 to 10 non-contact hours per week to this subject.

Subject Requirements and Method of Assessment

Any student failing to complete ANY of the compulsory subject requirements may fail the subject as a whole and receive a fail grade. It is compulsory that students meet the following requirements:
Compulsory Subject Requirements

- Presentation of an allocated paper and submission of précis and critique as per subject details above.
- Submission of review briefs for papers being presented as per subject details above.
- Submission of computer laboratory printouts as specified in the laboratory exercises.
  - Due date: 19:00 Friday 20th September.
  - Late submission penalty: 1 mark per day.
- Submission of case study (see appendix 2).
  - Due date: 19:00 Friday 11th October.
  - Submission in person to subject co-ordinator.
  - Submission without a cover sheet will not be accepted (see case study guidelines below).
  - Posted, faxed or email submissions will not be accepted.
  - Late submission penalty: 2 marks per day.
- Achievement of at least 45% in the final exam and at least 50% overall.
  Marks may be subject to scaling.

Assessment

The composite mark will be made up as follows:

- Seminar presentation, précis and critique. 12%
- Review briefs.  8%
- Required laboratory submissions. 5%
- Case study. 20%
- Final examination 55%

Return of Assessment Submissions:

Seminar presentation submissions and review briefs will be returned to students in the next seminar session. The case study and laboratory submissions will be available for pickup from the subject coordinator during the final exam period.

Supplementary Examinations:

- May only be permitted in extenuating circumstances such as verified illness beyond the student’s control or for religious reasons.
- All applications for special consideration are to be made on the appropriate form and submitted to the Academic Registrar’s Division, not the department.
- Students should note that supplementary examinations are not automatically granted when forms for special consideration are submitted.
Accommodation for Disability:

If a student with a disability requires reasonable accommodation in this subject they are strongly advised to discuss the issues early in the session with one of the following people: the Disability Liaison Officer, the Faculty Disability Advisor and/or the Subject Coordinator. For the faculty of Commerce please contact the Sub Dean, Mr Ron Perrin in room 40-311, telephone 02 4221 4118.

Textbook


Recommended Supplementary Texts


Case Study Guidelines

Non-Discriminatory Language Practice and Presentation

Students are expected to read and adhere to the University of Wollongong policy on Non-discriminatory Language Practice and Presentation in the Undergraduate Calendar. It is expected students will use non-sexist and non-racist language.

Acknowledgement Practice / Plagiarism

“Plagiarism means using the idea of someone else without giving them proper credit. That someone else may be an author, critic, journalist, artist, composer, lecturer, tutor or another student. Intentional plagiarism is a serious form of cheating. Unintentional plagiarism can result if you don’t understand and use the acceptable scholarly methods of acknowledgement.”
In either case, the University may impose penalties which can be very severe” (UOW Calendar 2001).
Cover Sheet

Students **must** include a word processed cover sheet attached to the front of their case study, specifying:
- Student Name (Please give full name, include any other name you use in class, underline surname).
- Student Number
- Subject Number
- Plagiarism / acknowledgement declaration signed and dated stating the following:

  I, _____________ declare that I have read, understood and adhered to the University of Wollongong policies on Plagiarism / Acknowledgment Practice and Non-discriminatory Language Practice and Presentation.
  Signature_______________________   Date_______________

Form of Presentation

- The case study is to be presented as a report to management, addressing each of the criteria as specified in the case study requirements.
- The narrative sections of the report should not exceed 1600 words (anything in excess of this will not be read) and must be typed using double line spacing with a 12 point font.
- Diagrams and charts may be hand prepared, but must be drawn using a flowcharting template and **not** drawn freehand.
## Seminar Program

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>TEXT REFERENCE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The evolution of IS models, and basic documentation techniques.</td>
<td>Chap 2</td>
</tr>
<tr>
<td>Overview of transaction processing cycles and an introduction to internal control.</td>
<td>Chap 2, Chap 3</td>
</tr>
<tr>
<td>Elements of the database environment and the development of a conceptual model.</td>
<td>Chap 9</td>
</tr>
<tr>
<td>Development of the physical model and the steps in normalization of data.</td>
<td>Chap 9</td>
</tr>
<tr>
<td>ER modeling and the REA approach to business process modeling.</td>
<td>Chap 10</td>
</tr>
<tr>
<td>ERP systems and their implications for internal control</td>
<td>Chap 11</td>
</tr>
<tr>
<td>Intra-organisational electronic commerce, network topologies and EDI.</td>
<td>Chap 12</td>
</tr>
<tr>
<td>Internet electronic commerce and internet protocols.</td>
<td>Chap 12</td>
</tr>
<tr>
<td>Issues of security, assurance and trust in electronic commerce.</td>
<td>Chap 12, AGS 1056</td>
</tr>
<tr>
<td>Introduction to the Systems Development life Cycle.</td>
<td>Chap 14</td>
</tr>
<tr>
<td>Overview of system selection, design and implementation – pulling it all together.</td>
<td>Chap 15</td>
</tr>
<tr>
<td>Overview of control in computer information systems.</td>
<td>Chap 16, Chap 17</td>
</tr>
<tr>
<td>Subject review and revision.</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 1

Author & Title of Article/ Chapter:

Title of Book/ Journal in which reading occurred:

Year of Publication:  
Vol. No. (Journal)  
Issue No. (Journal)  
Page Nos.

Summarise in three or four sentences what you thought the reading was about.

How easy or difficult did you find the reading? (please circle your choice):

Very  Difficult  Moderately  Reasonable  Easy
Difficult  Difficult

What is the question the author is raising in the early part of the reading?
E.g. What is the issue? Who says it’s an issue? In what sense is it an issue?
What evidence does the author offer to show that this is a relevant issue to be discussing?

Write down a quote from the reading which sums up the author's point of view.

Write down three points from the reading which could be discussed at the tutorial. These may be things you do not understand, agree or disagree with or things that occurred to you as you read the paper.
1. 

2. 

3.
The Sports Car Factory*  

*This case was written by Professor Elizabeth Rosa, Allentown College of St. Francis de Sales.

The Sports Car Factory was founded in 1950 by Trevor Smith-Jones, Sr., a British post-war immigrant to the United States. Smith-Jones had been a mechanic in an East London auto shop for several years, and when he arrived in Santa Barbara, California, in 1949, he decided to put his knowledge of British sports cars and his life savings into opening an auto shop that specialized in these cars.

Post-war California was devoted to the cult of the automobile, and there was no shortage of British sports car aficionados. Smith-Jones opened the Sports Car Factory in early 1950 and soon had a large number of clients. He realized that there was a substantial, untapped market in California for spare parts for British cars, and by 1953 the Sports Car Factory had left the auto repair business and had become solely a dealer in spare parts for British sports cars.

During his years as a mechanic in London, Smith-Jones had developed an extensive network of acquaintances in the British sports car industry. This network consisted mainly of spare parts dealers, auto dealerships, and sales representatives from the large automobile and parts manufacturing companies. He had maintained contact with these acquaintances while he was repairing cars in his Santa Barbara shop, and when he made the changeover to the spare parts business, his contacts were pleased to increase their export trade by continuing to sell parts to him. As the only U.S. importer of British sports car spare parts, the Sports Car Factory was able to sell its merchandise not only in southern California but also to auto parts dealers nationwide—wherever there were British sports car enthusiasts.

The Sports Car Factory’s business continued to grow throughout the 1950s and 1960s. Suppliers in Britain remained reliable, and in the 1970s market demand increased for such new items as replacement upholstery, convertible tops, and large body parts such as fenders and hoods. Smith-Jones had to look beyond Britain to find regular suppliers for these items and, as a result, established connections in Taiwan, the Philippines, and Canada, as well as with some American manufacturers who produced custom items. Smith-Jones was an honest tradesman who was trusted by his suppliers, so supply lines were consistent and prices reliable.

In 1979, Smith-Jones’s eldest son, Trevor Smith-Jones, Jr., joined the company as first assistant to his father. Smith-Jones, Jr. had inherited a passion for British sports cars from his father and had spent his teenage summers tinkering with vintage Triumphs, MGs, MGBs, and Jaguars that were in his father’s garage. After graduating from Berkeley in 1979, Smith-Jones, Jr. accepted his father’s offer to come to work at the Sports Car Factory and to learn the business inside out under his guidance. Smith-Jones, Jr. worked side-by-side with his father for the next several years, getting to know the suppliers and clients of the Sports Car Factory as well as the accounting and operations workings of the company. As the health of Smith-Jones, Sr. began to fail in the late 1980s, Smith-Jones, Jr. took over an increasingly
large share of the daily responsibilities for running the company, although Smith-Jones, Sr. still kept a tight hand on the overall operation.

Smith-Jones, Sr. died in 1993, leaving Smith-Jones, Jr. as president and CEO of the Sports Car Factory. Soon after his father’s death, Smith-Jones, Jr. requested extensive assessments of the company’s financial situation, its relations with suppliers and customers, and the structures of its accounting and operations systems. Already familiar with the company, the new CEO found no major surprises when he reviewed the results of the various department assessments. The company’s financial situation was strong, with a current ratio of more than three-to-one and with long-term indebtedness (a mortgage on the Santa Barbara warehouse) of only 10 percent of stockholder’s equity. Relations with suppliers remained steady and reliable, and operations at the warehouse were running smoothly, except for complaints of excessive paperwork from certain employees. Smith-Jones, Jr. had been aware of the paperwork problem for several years, but while his father was alive no changes to the system had been permitted. Smith-Jones, Sr. had believed that “you shouldn’t change a system that has served you well for the last 30 years.” Any attempts by Smith-Jones, Jr. to approach his father on the subject of reducing paperwork within the system had been quickly dismissed by the aging CEO.

The assessment of the company’s accounting system revealed the full scope of the paperwork problem. The Sports Car Factory was still running under the original, completely manual accounting system that Smith-Jones, Sr. had put into place in the 1950s. Although the system had served the company adequately in the ’50s and ’60s, it had been outgrown by the end of the ’70s. Smith-Jones, Jr. was convinced by the assessment that installation of a computerized accounting system throughout the company not only would reduce employee frustration with excessive paperwork but also would speed up order processing, thereby improving service to customers. In addition, it would help the company to keep better track of inventory levels. By using computerized accounting for inventory, the company could place inventory orders more efficiently, saving time and the expense of warehousing excessive inventory.

OTHER INFORMATION CONCERNING SPORTS CAR FACTORY

ORGANIZATIONAL STRUCTURE. In 1993, the Sports Car Factory had an after-tax profit of $400,000 on net sales of $1.5 million. The company employs 30 people in its plant in Santa Barbara. The Sports Car Factory is careful about the employees it hires, looking for enthusiastic, bright people who enjoy working with the customers. The employees range in age and experience, with the older, more experienced ones working in the technical assistance department because the company believes that their knowledge is most useful in the areas of direct customer contact.

When employees are hired, the company gives them several shares of Sports Car Factory stock along with generous benefits. Smith-Jones and management believe that if their employees are also shareholders, they will be interested in the financial success of the company. Management wants to create an atmosphere within the Sports Car Factory where employees are actively involved in improving the business. Thus, if sales become stagnant, all of the employees will search for ways to stimulate business. When management announces that a new information system is being introduced, the Sports Car Factory employees eagerly accept the changes. There is no hesitation or skepticism about the new system.
COMPETITION. The sports car industry in the United States is extremely competitive, with two privately held companies, the Sports Car Factory and Motor Works, dominating the market. Small local operations do exist. However, the majority of business belongs to these two companies because of their total commitment to servicing the sports car industry. The Sports Car Factory believes that its major threat in the industry comes from Motor Works because of the size of its operations and its threat to penetrate the Sports Car Factory’s market region of the western United States.

The Sports Car Factory differs from Motor Works in that it deals only with British sports cars, while Motor Works supplies parts for European sports cars and some Japanese models. Motor Works, located in Fishkill, New York, was founded in 1974 by the Kidd family. The company quickly expanded, and today it employs 50 people and has yearly sales of approximately $3 million, almost twice the yearly sales of the Sports Car Factory. These sales, however, result from supplying parts for all sports cars. While British sports cars are important to the business, equal attention is given to Italian and Japanese cars.

Motor Works’ sizable sales are worrisome to the Sports Car Factory because it fears that Motor Works will use its profits to try to expand into its market region. However, the Sports Car Factory also believes that if it can design and implement a new information system to enhance its sales process, it can protect its current market share and possibly expand.

RELATIONSHIP WITH SUPPLIERS. All of the components sold by the Sports Car Factory are manufactured outside the United States, with most coming from Southeast Asia, specifically Korea and Taiwan. The parts are made abroad because of the significant price discounts due to the cheaper labor rates in Asia. A part manufactured in the United States would cost the Sports Car Factory up to three times what it would cost to have it made in Asia.

The Sports Car Factory depends primarily on six suppliers to provide its inventory. These suppliers provide parts exclusively to the Sports Car Factory, while Motor Works and other smaller competitors import their parts either from Europe or Southeast Asian manufacturers. Because most of the parts are relatively easy and inexpensive to manufacture, Asian suppliers manufacture the entire range of parts. No one supplier specializes in any particular part. However, the quality of the parts may vary from supplier to supplier.

The Sports Car Factory has no way of tracking which part from which supplier is of the highest quality. If a few parts from the supplier are poor quality, even though the rest of its line is acceptable, the Sports Car Factory tends to flay the entire supplier’s product line. Because there are only a few vendors and several vendors are thought to produce poor quality parts, the Sports Car Factory deals primarily with only one or two. This arrangement, however, is not acceptable because these vendors have been raising prices at an unacceptable rate. The Sports Car Factory wants to introduce an information system that tracks the quality of each part from each supplier so it can order specific parts from certain vendors. Not having to rely on few vendors for the Sports Car Factory’s business should also help to reduce component prices.

Several other small problems exist between the Sports Car Factory and its suppliers because of the Sports Car Factory’s manual operating process. Back-orders are not
uncommon at the Sports Car Factory because lead time from suppliers is not consistent. The Sports Car Factory complains that its purchase orders are not being filled at an acceptable pace, while suppliers accuse the Sports Car Factory of giving them little notice of pending orders. The Sports Car Factory believes that the real problem lies in the purchasing process. The manual process is so lengthy that inventory levels are often depleted before the suppliers receive the purchase order. When the Sports Car Factory implements the new information system, it believes that the lead time problem will disappear and back-orders will decrease.

Suppliers often complain that their bills are not punctually paid. This, too, is directly related to the Sports Car Factory's manual accounting orders. Since bills must be reconciled before payment occurs, the pay date is often missed. The Sports Car Factory believes that an automated accounting system will help reconcile purchase orders and allow bills to be paid on time.

Despite these problems, the Sports Car Factory and its suppliers have a solid working relationship. Both depend upon each other for the bulk of their business. They have expressed interest in expanding any new systems that might facilitate their relationship.

CUSTOMER RELATIONS. Most parts sold by the Sports Car Factory go to individual car owners, with some parts purchased by mechanics and professional car restorers. The Sports Car Factory's business comes from customers who have a history of owning sports cars, because the Sports Car Factory realizes that only a small segment of the market consists of customers who just recently became involved with British sports cars. For the Sports Car Factory to attract new business, it must compete for the existing market share. At the same time, its main focus is on maintaining its customer base. The Sports Car Factory promotes car shows in the hope of attracting new people to the sports car industry. Its advertising is limited to monthly newsletters and automobile magazines.

ASSESSMENT OF THE ACCOUNTING SYSTEM

The assessment was prepared by the office of the controller of the Sports Car Factory.

The Revenue Cycle

Sales Order Taking. The Sports Car Factory makes all sales either by telephone or mail. All sales are on credit, and all customers have established lines of credit with the Sports Car Factory. Phone sales orders are taken by a staff of salespeople who are knowledgeable about British sports cars. The sales information is recorded on standardized order forms and forwarded to the sales office. Mail orders are forwarded directly from the mail room to the sales office.

Sales Office. Personnel in the sales office verify that the item prices on each order form are correct. This is done by manually checking the price of each item by its item number in the preprinted price list book. If the sale is charged to a customer’s credit card, personnel telephones the credit card company to verify the legitimacy of the charge. If the sale is to be put on the customer’s account, the customer’s file is reviewed and the credit history is checked.

Personnel must look at the inventory ledger to verify that items ordered are in stock. Each item must be located manually in the ledger by item number. This is only a preliminary check,
however, because the inventory ledger is updated only once a week and is not always correct. If an item is out of stock, it is so noted on the sales order as prepared in the next step.

A five-part sales order form is typed up. Copy 1 is forwarded to the billing department. Copy 2 is forwarded to shipping. Copies 3 and 4 are forwarded to the warehouse, and Copy 5 is filed by customer number in the sales office after the sale has been manually recorded on the customer’s file card.

**Warehouse.** The warehouse receives sales order Copies 3 and 4 from the sales office and picks the orders. Goods in stock are released to the shipping department with Copy 3 of the sales order. Copy 4 is filed in the warehouse file by sales order number.

Any items that are out of stock are marked as such on both Copies 3 and 4 of the sales order. Copy 3 goes forward with the items in stock, but Copy 4 is filed in a back-orders file by product code number. This file is reviewed when shipments of merchandise come into the warehouse. Back-ordered items can then be shipped out.

Each week, a warehouse employee prepares a list of items that were released from the warehouse during the week. This list is forwarded to inventory control.

**Shipping.** The shipping department receives Copy 2 of the sales order from the sales office and Copy 3, along with the goods, from the warehouse. Personnel in shipping compare Copy 2 with Copy 3, which may have been altered by the warehouse, and take note of any discrepancies. Copy 3 is marked “shipped” and is forwarded to the billing department. Warehouse personnel then prepare a packing slip for the carton and key the shipment information into the UPS shipping meter. The packing slip is attached to the carton and the goods are shipped via UPS, which picks up shipments once each day. The shipping information is maintained in the locked UPS meter, and Copy 2 of the sales order is marked with the date shipped and filed in the shipping department’s file.

**Billing.** The billing department receives the original phone or mail order form and Copy 1 of the sales order from the sales office. It then receives Copy 3 of the sales order, marked “shipped,” from the shipping department. With these documents in hand, billing types up a three-part sales invoice. Copy 1 is mailed to the customer, Copy 2 is forwarded to accounts receivable, and Copy 3 is kept in billing. Based on the day’s sales invoices, daily batch totals are calculated and the sales journal is maintained. Copy 3 of the sales invoice, the original order form, Copies 1 and 3 of the sales order form, and the tape of batch totals are all filed in the billing department.

**Accounts Receivable.** The accounts receivable department receives Copy 2 of the sales invoice. This department is responsible for accounting for the numerical sequence of the prenumbered sales invoices. Staff here also post accounts receivable to the accounts receivable ledger. After posting, the sales invoice copy is filed in accounts receivable by the due date of the receivable.

The mail room forwards Copy 1 of the daily cash prelist as well as customer remittance advices to accounts receivable. With these documents, accounts receivable first compares the prelist to the remittance advices and then posts the customer payments to the accounts
receivable ledger. The cash prelist and remittance advices are filed in the customer records file in accounts receivable by customer number.

**Mail Room.** The point of entry for all Sports Car Factory mail is the mail room. Here, customers’ checks, remittance advices, and mail order forms are received each day. Once the mail is sorted, the mail order forms are directly forwarded to the sales office for processing of all sales requested on those forms.

A three-part daily cash prelist is prepared, and all checks are endorsed to the Sports Car Factory with a hand stamp. Copy 1 of the cash prelist is forwarded to accounts receivable, and Copy 3 is forwarded to the cashier’s office. Copy 2 is kept in the mail room. Mail room personnel then separate the checks from the remittance advices. All checks are forwarded to the cashier, and the remittance advices are sent to accounts receivable. Copy 2 of the cash prelist is filed in the mail room by date prepared.

**Cashier.** The cashier receives copy 3 of the cash prelist and the endorsed customer checks. A two-copy bank deposit slip is prepared and taken to the bank along with the checks. Deposits are made once each day.

**THE EXPENSE CYCLE**

**Inventory Control.** Inventory control receives a weekly list of inventory items released from the warehouse. From this list, the inventory ledger is updated.

The inventory control manager prepares a purchase requisition whenever the amount in stock of an inventory item falls below that item’s reorder point level. The purchase requisition is prepared in duplicate, and Copy 1 is forwarded to purchasing, which will prepare a purchase order at the appropriate time. Inventory control receives Copy 3 of the purchase order from the purchasing department and compares it to its Copy 2 of the original purchase requisition. The two documents are filed together by purchase requisition number and are held until the department receives notification that the items ordered have been received.

Receipt of the inventory items ordered will be confirmed by Copy 2 of the receiving dock’s receiving report. When the receiving report arrives in inventory control, the purchase requisition and purchase order are pulled from the file and compared to it. The inventory items received are then posted to the inventory ledger. Copy 2 of the purchase requisition, Copy 3 of the purchase order, and Copy 2 of the receiving report are all filed together in the inventory control department by purchase requisition number.

**Purchasing.** Copy 1 of the purchase requisition is received from inventory control. The purchasing manager chooses the most appropriate supplier based on supplier information kept on file in the purchasing office.

Once a supplier has been chosen, a six-part purchase order is typed up. Copies 1 and 2 are mailed to the supplier, and Copy 3 is sent to inventory control. Copy 4 is forwarded to accounts payable, and Copy 5 to the receiving dock. Copy 5 is a “blind copy,” that is, it does not include the quantities ordered of each item. Copy 6 is kept in purchasing and filed along with Copy 1 of the purchase requisition by purchase order number, pending receipt of the receiving report.
When purchasing receives Copy 1 of the receiving report from the receiving dock, the purchase order is pulled from the file. Quantities received according to the receiving report are compared to the quantities ordered. Suppliers’ invoices (in two copies) either accompany the shipments or are received through the mail. In either case, the quantities and prices billed on the supplier’s invoice are compared to the purchasing documents before approval.

Copy 2 of the approved supplier’s invoice is forwarded to accounts payable. Copy 1 of the purchase requisition, Copy 6 of the purchase order, Copy 1 of the receiving report, and Copy 1 of the approved supplier’s invoice are filed together, by purchase order number, in the closed purchase orders file in the purchasing department.

**Receiving Dock.** The receiving dock receives Copy 5, which is the “blind copy” of the purchase order, from the purchasing department. The purchase order is kept on file until the goods arrive at the dock. When the shipment arrives, the purchase order is pulled from the file, and the items received are inspected and counted. When the shipment has been cleared, a four-part receiving report is typed.

Copy 1 of the receiving report is sent to purchasing, Copy 2 is sent to inventory control, Copy 3 is forwarded to the warehouse along with the goods, and Copy 4 is filed by purchase order number, with the purchase order attached.

**Warehouse.** The warehouse receives the shipment of goods with Copy 3 of the receiving report. The warehouse person signs the report upon receiving the goods at the warehouse, and the items are shelved. The signed Copy 3 of the receiving report is forwarded to accounts payable.

**Accounts Payable.** Copy 4 of the purchase order is received from purchasing and kept on file pending receipt of the goods purchased. When the department receives the signed Copy 3 of the receiving report from the warehouse, which indicates that the items purchased have been received, accounts payable matches the items received with those ordered on the purchase order. These two documents are kept on file until the supplier’s invoice is received.

When the approved Copy 2 of the supplier’s invoice is received from the purchasing department, accounts payable compares it to the purchase order and receiving report and verifies the accuracy of the supplier’s prices, extensions, and footings. The three documents are filed together by due date of the supplier’s invoice. The invoice packet will be presented to the cashier’s office for payment when its due date arrives.

**Cashier.** On the date on which an account payable falls due, the cashier receives from accounts payable the approved supplier’s invoice to be paid. Attached to the invoice are Copy 4 of the purchase order and Copy 3 of the receiving report. The cashier reviews these documents and prepares a check for payment. As the cashier may not sign the check, the authorized signature or signatures must be obtained before the check can be mailed. Once the check is ready for disbursement, the supplier’s invoice, marked “paid,” and the attached documents are returned to accounts payable for filing.

As the day’s checks are prepared, so is that day’s check register, which is a log of every check written in check number sequence. Two copies of the register are prepared, and Copy
2 is forwarded to the employee in the controller’s office who maintains the general ledger. Copy 1 of the check register is kept in the cashier’s office and is used to record cash disbursements in the cash disbursements journal. The cashier’s copy of the check register is kept on file by register date.

Payroll. The Sports Car Factory uses the services of XYZ Payroll People, an independent payroll service company, to prepare payroll checks, payroll taxes, and all supporting documentation. Copies of payroll documentation are kept on file in the controller’s office.

CASE REQUIREMENTS

1. Identify the Sports Car Factory’s critical success factors and primary objectives. What types of information might be helpful in evaluating these objectives? Create a mission statement that would be appropriate for the Sports Car Factory.

2. Develop a current organizational chart based on the information.

3. Analyze the current system and identify specific weaknesses that must be addressed by a new improved system. As part of your analysis, prepare a systems flowchart of the current system.

4. Design a new information system for this company. Your solution should include the following items:
   a. An overview of the primary features of the new system, explaining why this is the best solution for the firm to pursue.
   b. A systems flowchart of the new information system, showing automated and manual procedures.
   c. A description of the technology platform for the system.
   d. A data model of the business process using the entity relationship (ER) diagram approach.
   e. A list of financial and non-financial data attributes for each entity in the ER diagram.
   f. Four user views, which can be source documents or management reports. At least one view should support the needs of a non-accounting user.
   g. The base tables needed to support the views; these should be normalized to 3NF.
   h. A discussion of the appropriate accounting controls for the new system.