Mock Exam – Sample Answers

# **Section A: Case Study**

Making sure products are at the right time is especially important when you’re dealing with seasonal items and perishable food.

Being a confectionary maker and retailer, timing is everything for GH Chocolates Inc. Too little chocolate on the shelves in the weeks leading up to Easter means missed sales but too much is just as disastrous. For years, store managers were able to draw on their experience to analyse and predict seasonal sales with some certainty, taking into account the time of year, weather and previous year’s sales quantities. But the nearly 100-year-old company’s growth from 20 to almost 100 retail stores throughout Australia in the last 10 years and an expanded list of about 400 products in peak seasons was too much to handle.

That is why GH Chocolates Inc. are planning to invest their IT dollars on a new ERP system with supply chain (SCM) software that will help them forecast demand, schedule production, and better manage inventory.

# **Section A**

You are required to address the following queries from the CEO:

*a)* *What is the difference between customer relationship management (CRM) and supply chain management (SCM)? Discuss whether there is a need to additionally invest in CRM.*

* SCM is involved with coordination between customers and suppliers, and CRM is used to manage customer relationships
* With CRM, the company is trying to present “one face” to the customer. With SCM, the company is trying to create a virtual organization to meet the end-customer’s needs.
* In CRM, companies use knowledge warehouses to gather and summarize voluminous data on the customer (contacts, quotes, orders, etc.) to gain understanding. In SCM, technology is used to share demand and production data among all participants in the supply chain.
* SCM is used when critical, long-term relationships are developed between the customer and supplier. For GH Chocolates, CRM can be useful for cultivating customer relationship (of prospecting, acquiring, servicing, and retaining customers).
* Whilst CRM is useful for sales planning and forecasting, providing useful marketing analytics as well as service analytics, GH Chocolates may have to perform a cost-benefit analysis before additionally investing in CRM if SCM could suffice for the moment.

*b) What are some of the integration issues that the company might face?*

* Integrating disparate IT applications – GH Chocolates have been in operation for 100 years and it will not be easy to integrate the legacy systems with the new systems.
* If GH decides to invest in “Best of breed applications” - no one vendor can respond to every organisational need
* Multiple applications not designed to work together and so require proper configuration management.
* Data integration issues – migration of data from different systems
* There will also be issues with process integration and application interface

*c) What would be your advice in terms of managing this change from the old legacy systems to the new integrated enterprise systems?*

* Need to ensure there’s a proper plan to guide the change and having strong leadership commitment.
* Keep staff informed by communicating changes and the need for these changes. Failure to communicate the change vision appropriately and adequately – lead to a lack of buy-in or support from the different layers of organisation
* Identifying training needs
* Training staff before, during and after implementation
* Using staff as expert users and trainers (Staff could relate to them – Train the trainer approach
* Involve (and convert) process owners of legacy systems
* Institutionalise the new approaches in the corporate culture. If the change is not reinforced, people will tend to revert to the old way

*d) What is workflow management? Discuss the benefit of workflow tools in ERP systems.*

* A workflow management system (WFMS) provides an infrastructure for the set-up, performance and monitoring of a defined sequence of tasks, arranged as a workflow.
* Useful for ERP implementation initiative: *(any 4 or similar points)*
* Enables employees to carry out complex business processes and track the status of a process at any time.
* Employees can track and monitor progress of workflow tasks and take action if tasks seem to be falling behind schedule
* Proactively connects employees with business transactions using internal email system and workflow tasks
* Workflow system can automatically take various actions like:
  + Changing the workflow task priority
  + Sending email reminders to the employees responsible for the work
* For sporadic processes, workflow tools are a powerful way to improve process efficiency and effectiveness

# **Section B**

***Question 2:***

1. *What are the characteristics of Real-time Enterprise Systems?* 
   * **Agility** – ableto meet the time- to-market requirements
   * **Available anywhere anytime** - business processes need to enable customers, partners, and employees to use, participate and be productive from anywhere and anytime.
   * **Scalable** - to deal with such large volumes and wide varieties of data.
   * **Intelligent** - designed to leverage predictive analytics and machine learning capabilities
   * **Collaboration Driven** - designed to leverage the collective wisdom of all the stakeholders and for collaboration
   * **Low Latency** - enable near real time processing and responses
2. *Define integrated information systems and explain why they are essential in today’s globally competitive business environment.*

* A business process occurs when a series of activities are performed in more than one functional area. Making and selling a product to a customer is a process that involves sales, production, and accounting activities. The people who work in each activity must work together to make the sale go smoothly - taking the order, scheduling production, shipping the product, recording data about production and sales and the ultimate collection of the customer’s payment.
* Today, business managers try to think in terms of business processes that integrate the functional areas, thus promoting efficiency and competitiveness.
* An important aspect of this integration is the need to share information between functional areas, and with business partners. ERP software provides this capability by means of a single common database.
* The better a company can integrate the activities of each functional area, the more successful it will be in today’s highly competitive environment.
* Integration also contributes to improvements in communication and workflow. Each area’s information system depends on data from other functional areas.

***Question 3:***

*a) Identify the factors that led to the development of Enterprise Resource Planning (ERP) systems.*

* Hard economic times of the late 1980s and early 1990s caused many companies to downsize and reorganize - stimulus to ERP development
* Inefficiencies caused by the functional model of business organization
* Silos of information - limits the exchange of information between the lower operating levels
* Functional model led to top-heavy and overstaffed organizations incapable of reacting quickly to change
* Process business model
* Information flows between the operating levels without top management’s involvement
* Further impetus for adopting ERP systems has come from compliance with the Sarbanes-Oxley Act of 2002 which requires companies to substantiate internal controls on all information

*b) Describe cloud computing and why it is becoming important for ERP providers.*

* The Cloud or cloud computing refers to an application that is hosted on or run on Internet servers. All the companies that have these services -Google, Facebook, Yahoo, Flickr, Apple -- have servers or server farms.
* Cloud ERP is an approach to enterprise resource planning (ERP) that makes use of cloud computing platforms and services to provide a business with more flexible business process transformation.

Advantage:

* Cloud based ERP benefits customers by providing application scalability and reduced hardware costs.
* Having business applications in the “cloud” allows staff to work anywhere, anytime on any device via a web browser-based application. Data/Files are stored in a place not on your own device, so you can get it on multiple devices.
* Less computing power is required – and might not need as much hard-drive space.

***Question 4:***

1. *Explain why unintegrated Marketing and Sales information systems can lead to company-wide inefficiency.*

Problems with unintegrated Marketing & Sales Information Systems:

* Having separate information systems throughout the company for functional areas such as Sales order system, Warehouse system & Accounting system may lead to inaccurate and inconsistent data.
* Information stored in the disparate systems is not available in real time
* This will cause the following problems (which lead to company-wide inefficiency):
  + - Incorrect pricing and quotations
    - Problems or delays in processing orders
    - Problems with invoicing and handling returns
    - Problems with credit management

*b) Why is credit management so important? What problems would you envisage in an unintegrated system and how could this be alleviated using an ERP system?*

* Credit management requires a good balance between granting sufficient credit to support sales and making sure that the company does not lose too much money
* It involves:
  + - Setting a limit on how much a customer can owe at any one time
    - Monitoring that limit as orders come in and payments are received
    - Require real-time information
    - Sales representative needs to be able to review an up-to-date accounts receivable balance when an order comes in
* Problems with unintegrated information systems - Results in out-of-date or inaccurate accounting data that can cause problems when a company is making operational decisions
* How an integrated ERP Systems help - Accounts receivable is immediately updated

***Question 5:***

*a) The procurement process is often one of the major processes to be considered for re-engineering initiatives. What are some of the reasons for this?*

Major factors contribute to the importance of purchasing as a process to be engineered:

* Rising Costs
* Materials and supplies are costly
* Advancing Technology
* Technical purchasing expertise
* Need for high quality materials and services
* the quality of the input depicts the quality of the output
* Shorter lead times
* Shorter lead times refers to how quickly an organisation can manufacture goods – thus reducing expenses
* JIT (just in time inventory)
* Established ongoing relationships with your vendors

*b) Describe how production planning data in an ERP system can be shared with suppliers to increase supply chain efficiency.*

* Traditional supply chain - Information is passed through the supply chain reactively as participants increase their product orders. The inherent time lags cause problems
* Working with suppliers in a collaborative fashion requires trust among all parties
* Company opens its records to its suppliers
* Suppliers can read company’s data because of common data formats

Advantages

* Reductions in paperwork
* Savings in time
* Other efficiency improvements

***Question 6:***

*a) Discuss the major tasks that should be carried out during the scope and commitment phase of the ERP life cycle.*

* Developing a realistic business case.
* Determine the scope and what the system needs to do to achieve the project goals and success factors
* Identify potential risks and gaps.
* A long-term vision for the new system and proposed implementation plan
* You need to elicit top management’s commitment.
* At this stage, may also consider engaging external consultant expertise

*b) Develop an Event Process Chain (EPC) diagram for a process.*

The following steps refer to the “Creation of Customer Record in SAP ERP” process.

The process starts upon receipt of a customer creation request.

* First, the sales department checks if the customer is an existing customer, using records from the Sales &   
   Distribution (SD) and the Accounts Receivable (AR).
* If the customer record is already in the system, the customer creation will be aborted.
* If the customer record does not exist, a new record will be created.
* The "Company Code Data", "Sales Area Data" and “General Data" are entered.
* A new customer account number is generated.

***Question 7:***

*a) What is configuration management and why is it important in ERP implementation?*

* Configuration management is a systems engineering process for establishing and maintaining consistency of a product's performance, functional and physical attributes with its requirements, design and operational information throughout its life.
* The need for an efficient configuration management system ...
* when applied over the life cycle of a system, provides visibility and control of its performance, functional and physical attributes
* verifies that a system performs as intended, and is identified and documented in sufficient detail to support its projected life cycle
* facilitates orderly management of system information and system changes

b) *What is risk? Identify some factors that might affect a project risk.*

* Risks are the consequences of uncertainty.
* Risk is a combination of the probability of a negative event occurring and its consequences – needs to be measurable and identifiable.
* Factors affecting project risks:
* Poor project planning
* A weak business case
* Lack of senior management involvement & support
* Lack of user involvement
* Technology new to the organisation
* Lack of business ownership
* Poor or ineffectual training - train the trainer, consultants