



UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

Academic Year 2010/2011 – 3<sup>rd</sup> Year Examination – Semester 6

***IT6303: e-Business Applications***  
**Structured Question Paper**

**20<sup>th</sup> August, 2011**  
**(TWO HOUR)**

<b>To be completed by the candidate</b>
BIT Examination Index No: _____

**Important Instructions:**

- The duration of the paper is **2 (two) hours**.
- The medium of instruction and questions is English.
- This paper has **4 questions** and **22 pages**.
- **Answer all questions.**
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.  
If a page is not printed, please inform the supervisor immediately.

**Questions Answered**

Indicate by a cross (x), (e.g.  ) the numbers of the questions answered.

<b>To be completed by the candidate by marking a cross (x).</b>	Question numbers			
	1	2	3	4
To be completed by the examiners:				

- 1) (a) Carry out a situational analysis identifying the Strengths, Weaknesses, Opportunities and Threats for the biscuit manufacturing company 'Crust'.

(40 Marks)

**ANSWER IN THIS BOX**

<b>Strengths</b>	<b>Weakness</b>
<ol style="list-style-type: none"> <li>1. Biscuit industry has grown over the years</li> <li>2. Crust grown steadily for the last years</li> <li>3. Has the second largest market</li> <li>4. Has largest distribution network in Sri Lanka</li> <li>5. Over 12000 skilled employees</li> <li>6. 5 factories situated across the country</li> <li>7. Highly automated</li> <li>8. Loyal customers</li> <li>9. Quality of biscuit they produce</li> <li>10. Have e-Business solution linking with suppliers</li> </ol>	<ol style="list-style-type: none"> <li>1. Only caters to the young generation</li> <li>2. Integrated solution to link the factories, dealers and their head office to work more cohesively with its market</li> <li>3. Seriously considering eBusiness and e Collaboration</li> </ol>
<b>Opportunity</b>	<b>Threat</b>
<ol style="list-style-type: none"> <li>1. It is not easy to enter in to the market due to high investment</li> <li>2. The children's, the middle-aged and the older generation markets are yet to be captured</li> <li>3. Expand the market by introducing different sized and individualized packs</li> <li>4. Catering to corporate clients</li> <li>5. Introducing health conscious products (low-calorie, low sugar, low-carbo)</li> <li>6. Expand into related products such as chocolates, cakes, crusty snacks, noodles, health food</li> <li>7. Collaboratively work with manufacturers of products that are consumed with biscuits (tea, coffee)</li> <li>8. Integrated solution to link the factories, dealers and their head office to work more cohesively with its market</li> <li>9. Seriously considering eBusiness and e Collaboration</li> </ol>	<ol style="list-style-type: none"> <li>1. There are many local and multinational biscuit manufacturers who have emerged in the market</li> <li>2. Industry is dominated by small number of large firms</li> <li>3. Company is experiencing heavy competition from other manufacturers</li> </ol>



(b) Identify whether the bargaining power of suppliers and bargaining power of customers are high or low for this company. Propose strategies to deal with these situations.

(20 Marks)

<b>ANSWER IN THIS BOX</b>
<b>Bargaining power of suppliers is High!!!!</b>
Supply chain management
Product differentiation
Strategic Alliance
Backward integration
ePortal
<b>Bargaining power of customers is very High!!!!</b>
VA product
Product differentiation
Forward integration
Marketing
Product bundling
Product development
Strategic Alliance
Customer relationship management
Cost leadership
Pricing strategies
Expand product line

(c) Propose two most suitable e-Business Models for 'Crust' to collaboratively work using e-Business to expand their market share. Illustrate and explain why you think they are the most suitable e-Business Models.

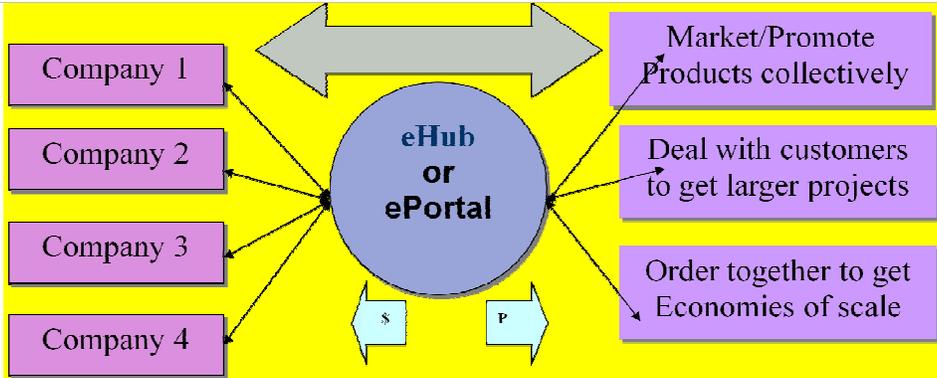
(40 Marks)

<b>ANSWER IN THIS BOX</b>	
<b>1. Supply Chain Model</b>	
<ul style="list-style-type: none"> <li>• Virtual Value Chain</li> <li>• Information flow across the supply chain</li> <li>• All parties have a strong electronic bond and backend systems</li> <li>• Some companies do/don't own any part of the value chain</li> <li>• They have access to information about all from supplier/manufacturer to the customer</li> </ul>	
<b>Should be related to the scenario</b>	
<b>2. Full-Service Provider Model</b>	

- Has to know a lot about the customer
- Provides own or third party products
- Offers a wide range of products
- Offers different channels Internet, face-to-face, phone, etc.
- Sells it's own products+ Commission for third party products
- Some charge customers a service fee

**Should be related to the scenario**

**3.Revenue sharing eB Model**



- The sellers get together through a Portal
- They Market/ Promote products collectively to a larger market segment
- Sellers can work on larger projects/orders as they work collectively
- Collective bulk orders give them bargaining power over suppliers
- Resources as well as profits are shared among companies

**Should be related to the scenario**

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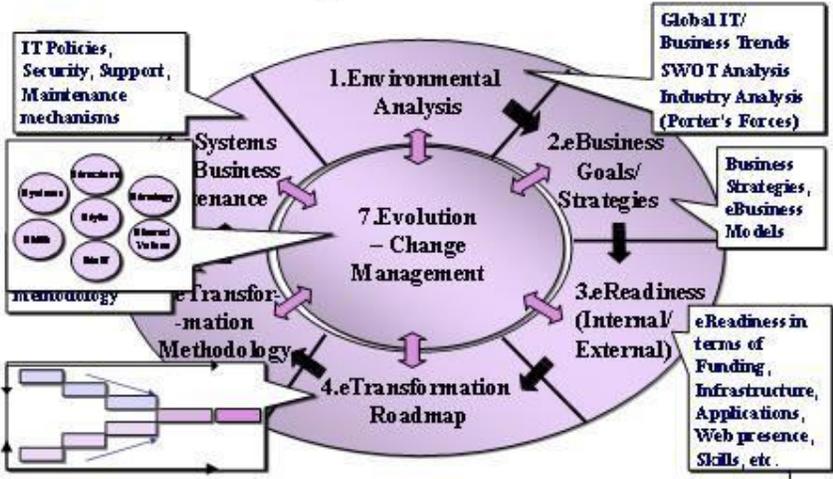


(b) There are many aspects that an organisation should look into when e-Transforming from a traditional business to an e-Business. Illustrate and briefly discuss an e-Transformation methodology and its stages.

(60 Marks)

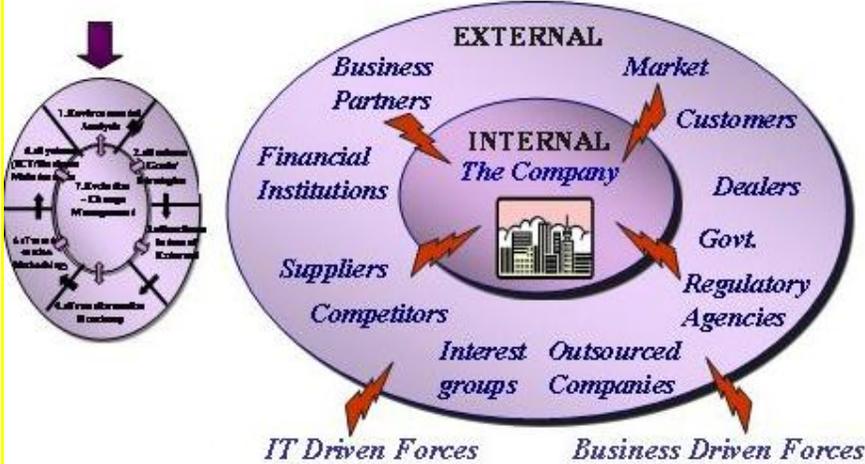
**ANSWER IN THIS BOX**

**The Seven E's In eTransformation**  
- A Strategic eTransformation Model

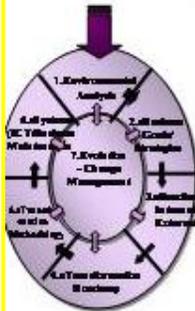


1.

**The Business Environment**



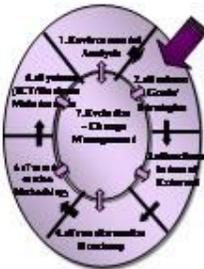
# SWOT Analysis



Strengths	Weaknesses
The Industry knowledge of the CEO Manufacturing flexibility Company culture-best practices Innovation and creativity Customer base-Client pedigree Industry reputation	Over-reliance on the CEO Size of business - small Not using Web for any purpose Manual quality systems Lack marketing strategies IT is not used as a strategic tool
Opportunities	Threats
Possibility of acquisition New product/market development Develop products to niche mkt Alliance with giants in plastics Web as a strong marketing tool eBusiness opportunities	Raw material price increases Aging technology Market intelligence Legislations - Food/recycling Market - large competitors No direct link to end-user

2.

# Goals, Directions, Strategies and Competitive Advantage



3.

## eReadiness (Internal/External)



**Internal:**

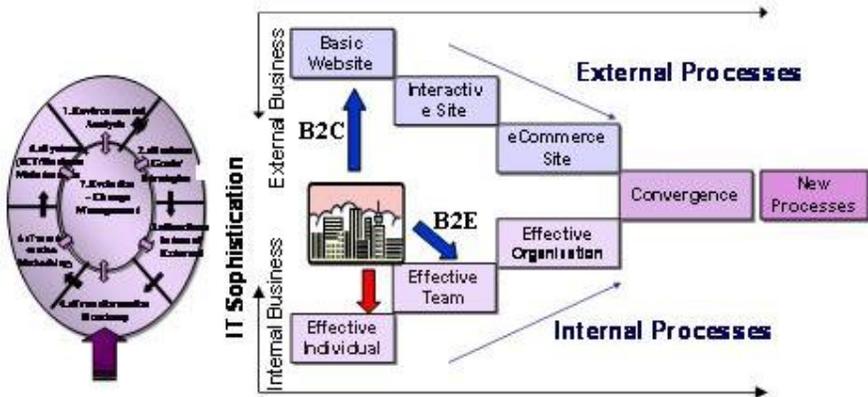
- **Business processes** – Well defined processes
- **Applications & Infrastructure**
- **Web presence** – Existence/ usage
- **Skills** –Level of IT skills of the employees
- **Executive mgt** – Commitment/Support
- **External connectivity** – Channels
- **Future directions** – Plans for expansions

**External:**

- **Customers, Suppliers, Potential users**

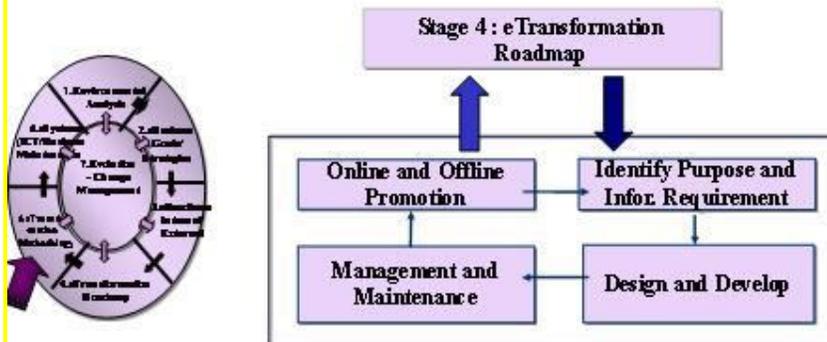
4.

### The Company's Position and Path in the eTransformation Roadmap



5.

### External eTransformation Methodology



6.

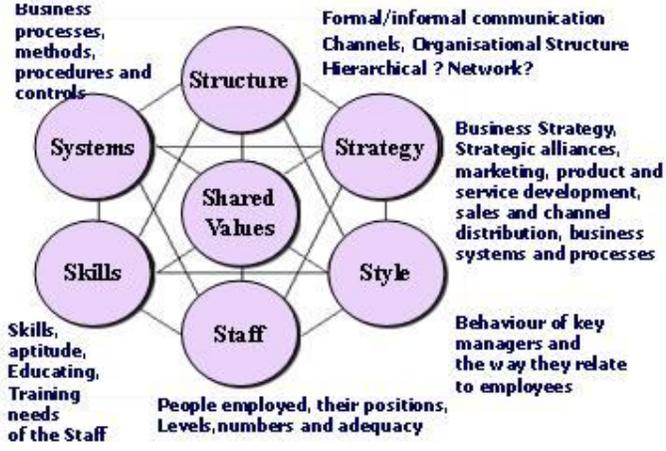
### eSystems (Policies, Support, Maintenance)



- **Management Controls** : Standards, guidelines to users, Procedures, Manuals
- **Security Measures** : To deal with common threats (sabotage, hacking, privacy, etc.) and contingency planning and disaster recovery
- **IT Maintenance and Support:** (Support for ICT infrastructure, upgrading, backing up, maintenance, troubleshooting, Support by the ISP and Vendors)

7.

### 7S Model for Change Management



(c) Discuss how ‘Crust’ can Market its new e-Business ventures to the newly found markets using Internet based technologies and electronic media.

(20 Marks)

<b>ANSWER IN THIS BOX</b>
<b>The Traditional Marketing Mix</b>
<b>Product</b> Product variety, quality, Design, Features, Brand name, Packaging, Services, Warranties,
<b>Price</b> List Price, Discounts, Allowances, Payment period, Credit Terms,
<b>Promotion</b> Sales Promotion, Advertising, Public Relations, Direct Marketing, Sales force
<b>Place</b> Channels, Coverage, Locations, Inventory, Transport
<b>The New Marketing Strategies</b>
<b>Offline Promotion</b> Business Cards  Industry Magazines,  Media Advertisements  Newspapers,  Newsletters, brochures,  Banners, sponsorships,  Etc., etc., etc
<b>Online Promotion</b> Strategic Alliances,  Email, Newsletters,  Search engines,  Banner Adverts,  Viral Marketing,  Analyse site traffic  Database Marketing

Discuss through the above mentioned points.

3) (a)

Illustrate and briefly describe the following e-Business models and its advantages to the business organisations and its customers.

- i. Direct to customer Model
- ii. Global Trade Platform Model

(30 Marks)

**ANSWER IN THIS BOX**

### Direct-to-Customer Model

**Traditional Business Model**

Supplier → Computer Manufacturer (eg. IBM, HP) → Distributor → Dealer → Customer

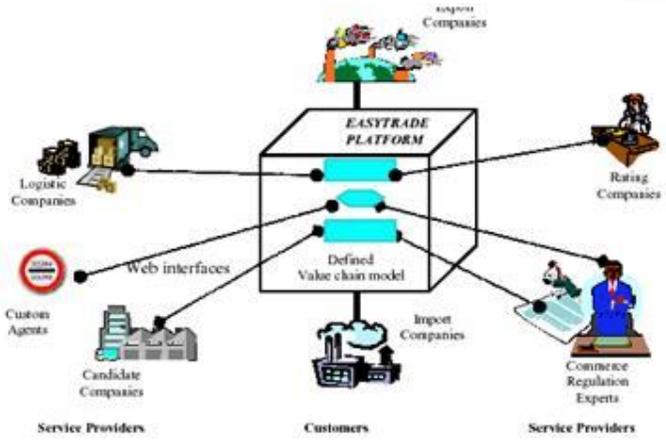
**New Business Model**

Supplier → Manufacturer → Customer

P → Flow of Product  
 ← S ← Flow of Money

- Can sell at lower prices
- Build to customer order
- Receive payment earlier
- Speed up new product release cycles
- Use customer data to provide customized value-added service
- Proactive decision making

# A Global Trade Platform for SMEs



- It is an innovative ICT platform
- Dedicated to foreign trade
- Which allows organizations (especially SMEs) to manage and carry out their business to business transactions on the internet
- Inside a high security environment
- Involving different types of users such as companies, bank and other foreign trade sector operators.

(b) Are the following statements true or false? Justify your answer using an example each.

- i. “When the ‘bargaining power of suppliers’ is high, a company can use the revenue sharing e-Business model to lower the power of suppliers.”
- ii. “When the ‘threat of new entrants’ is high in an industry, existing companies could use the full service provider model to increase the barriers of entry to the industry.”

(40 Marks)

<b>ANSWER IN THIS BOX</b>
<b>i. True</b>
<b>Revenue sharing eB Model</b>
<ul style="list-style-type: none"> <li>• The sellers get together through a Portal</li> <li>• They Market/ Promote products collectively to a larger market segment</li> <li>• Sellers can work on larger projects/orders as they work collectively</li> <li>• Collective bulk orders give them bargaining power over suppliers</li> <li>• Resources as well as profits are shared among companies</li> </ul>
<b>i. True</b>
<ul style="list-style-type: none"> <li>• Has to know a lot about the customer</li> <li>• Provides own or third party products</li> <li>• Offers a wide range of products</li> <li>• Offers different channels Internet, face-to-face, phone, etc.</li> <li>• Sells it’s own products+ Commission for third party products</li> <li>• Some charge customers a service fee</li> </ul>

(c)

Explain how Customer Relationship Management (CRM) can help an organization to achieve competitive advantage over existing competition as well as new entrants to the industry.

(30 Marks)

**ANSWER IN THIS BOX**

- Identify your best customer
- Customize/personalize products and services based on detailed knowledge of customer wants, needs and buying habits
- Have a record of all contacts a customer had with a company in an easily accessible form
- Provide a consistent user experience across all contact points
- Can provide Loyal cards, discounts, Point system

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graph LR
    Marketing[Marketing] --> Sales[Sales]
    Sales --> Service[Service]
    Service --> End[...]
  
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**Acquire**

- Innovation
- Convenience

**Enhance**

- Reduce Cost
- Customer Service

**Retain**

- Listening
- New Products

**Sales/Product Strategies**

**Value Loyalty**

**Differentiation**

**Bundling**

**Adaptability**

4) (a) Briefly explain the three external processes of the e-Business Roadmap.

(30 Marks)

**ANSWER IN THIS BOX**

**E-Business Road Map**

The diagram illustrates the E-Business Road Map. It features two parallel paths of development. The top path, labeled 'External Processes', consists of three yellow boxes: 'Basic Website', 'Interactive Site', and 'E-Commerce Site', connected by a yellow arrow pointing right. The bottom path, labeled 'Internal Processes', consists of three yellow boxes: 'Effective Individual', 'Effective Team', and 'Effective Organization', also connected by a yellow arrow pointing right. A purple arrow at the bottom points from left to right, indicating the overall direction of the roadmap. At the end of these paths are two orange boxes: 'Convergence' and 'New Processes'.

**Basic Web Site:**

The organization has its own domain name and brochure ware type of website hosted with an ISP  
 The website contains company information, static e-catalogue, e-mailing lists, Answers to FAQs, e-messages.

**Dynamic Site:**

Dynamic website providing two-way flow of information. Answers structured queries. Existence of a news forum, chat area, feedback forms. Uses own domain name, database, scripting languages.

Requires a web server and a high speed dedicated connection to the internet. Strong back-end systems and security measures.

**eCommerce Site:**

The organization should have a secure web server to facilitate the financial transaction or a link to a payment gateway to process online payment.

Supporting back-end system, international security standard, business contingency planning need to be in place.

- (b) Explain why B2B collaborations are more important and beneficial than B2C interactions when transforming into an e-Business.

**(30 Marks)**

**ANSWER IN THIS BOX**

B2B collaborations are working with strategic partners such as suppliers, financial institution corporate customers, business partners etc.

B2C interactions are working directly with customers. B2B has stronger and long lasting partnerships with other business which generally more money and establish business venture. B2B is strongly coupling your company with other businesses.

B2C is dealing with existing and potential customers. This involves advertising, marketing, selling and customer relationship management.

B2C is loosely coupled compared to B2B and deals with 1-1 relationship with individual customers.

Hence, B2B has more monetary and market share advantages over B2C.

- (c) Explain how a developing country where many industries consist mainly of ‘small and medium organisations’ could benefit from e-Business to expand its industries business and achieve economic development of the country.

**(40 Marks)**

**ANSWER IN THIS BOX**

Internet offer as a business vehicle and an efficient and effective channel for marketing, exchange of information, interaction and supporting the distribution of goods/services

**SMEs Constraints**

- Financial
- Staff
- IT infrastructure
- Skills
- Know-how

**For SMEs, the major advantages of eBusiness**

- An inexpensive way of advertising, building a global store front

- Conducting market research
- Providing catalogues and building fast communication and image in the global market

Developing Countries differ from developed country

- Infrastructure
- Cultural
- Social and regulatory difference

In formulating strategies for eTransformation of developing countries the barriers specific to countries with lower GDPs have to be taken into serious consideration.

Barriers for ecommerce development

- Inadequate infrastructure
- Unstable sources of financial resources
- Low literacy in English
- Inadequate regulatory policies and low development of virtual trading

#### **Benefit of eTransformation of SMEs**

Business and economic growth in the global market

Supply chain and investment strategic alliances

Infrastructure development and improvement of the quality of life

SMEs are looking for less complicated, cost effective, easy to handle solutions that require less manpower to maintain the systems

#### **Directions of eBusiness Transformation**

- ePortals or eHubs maintained by industry associations
- Virtual shopping malls maintained by third party associations

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