UNIVERSITY OF PETROLEUM & ENERGY STUDIES
End Semester Examination, December 2021

Course: Program: MBA-IB   **Semester: III**
Subject/Course: E-Business & E-Commerce   **Max. Marks: 100**
Course Code: DSIT 8001   **Duration: 3 Hours**

Instructions : The Question Paper has 4 Sections, and there is internal choice in Section C

Q.No	SECTION A - 10Q x 2M = 20 Marks	Marks	CO
Q1	Define the term C2B	2	CO1
Q2	Define the term PRM	2	CO1
Q3	Define the term reintermediation	2	CO1
Q4	Define the term digital signature in context of e-commerce security	2	CO1
Q5	Define the term infomediaries	2	CO1
Q6	Define the term self-hosting model in e-Commerce	2	CO2
Q7	Define the term EDI	2	CO2
Q8	Define the term sell-side e-marketplace	2	CO2
Q9	Define the term SET in context of e-Commerce security	2	CO2
Q10	Define the term Authorization in in context of e-Commerce security	2	CO2
	SECTION B - 4Q x 5M = 20 Marks		
Q11	What are the benefits and impacts of e-auctions? What are their types?	5	CO1
Q12	Explain the points to be considered in developing an E-Commerce strategy for an e-business	5	CO4
Q13	Discuss the scope of eCRM, its benefits and limitations.	5	CO4
Q14	Elaborate the special requirements an online business MUST consider in its formation?	5	CO2
	SECTION C - 3Q x 10M = 30 Marks		
Q15	How does B2B Ecommerce Model work? Discuss the role of intermediaries in B2B. Why sell-side and buy-side marketplaces in the same company are usually separated, whereas in an exchange they are combined? Justify your logic.	10	CO2
Q16	Explain the types of B2B e-marketplaces, and their functions with relevant examples for each type. Elucidate the B2B implementation issues.	5+5	CO3
Q17	a) Explain the E-Commerce security concerns that might arise if a Customer purchases an item from an online store? b) Explain the basic type of EC security attacks that an EC company must counter	5+5	CO5
	OR		
Q17	a) Explain the electronic bill presentment and payment systems, and their types. b) Explain smart cards, their types, Smart Card OS and their applications in healthcare	5+5	CO5
	SECTION D - 2Q x 15M = 30 Marks		

Q18	**Case Study 1 – Capital One creates value through e—business** Capital One was established in 1995. It offers credit cards, savings, loans and insurance products in the UK, Canada and the US. It is a financially successful company, achieving high returns of 20% earnings per share growth and 20% return on equity growth. It has been profitable every quarter in its existence and in less than ten years it achieved net income of over $1 billion. Capital One uses what it calls an Information-Based Strategy (IBS), which brings marketing, credit, risk, operations and IT together to enable flexible decision making.It describes IBS as 'a rigorously scientific test-and-learn methodology that has enabled us to excel at product innovation, marketing and risk management – the essentials of success in consumer financial services'. For customers it aims to offer financial solutions tailored to individual customers' needs. It does this through mass-customization: offering different rates and fees structures to different customers depending on their risk status. Its mission can be summarized as to deliver the right product, at the right price, to the right customer, at the right time through continual testing, learning and innovation. The scale of use of information is indicated by different operations in the business. In corresponding with customers, *The Banker* reported that Capital One sends out one billion items of mail per year and handles 90 million inbound calls, 300 million outbound calls, 230 million Internet impressions and 40 million transactions per day. Together with its subsidiaries, the company had 45.8 million managed accounts and $60.7bn in managed loans outstanding as of June 2003. The information-based strategy is managed by the CIO, Gregor Bailar. He is in charge of operations related to computer systems, analysis of customer data, data protection, setting data standards, business continuity and information security.According to *The Banker*, Gregor says: *CIOs today need to be technology alchemists. They need to be strong in professional technical methodologies so that their conversation is a disciplined one but, at the same time, they need to understand the business, be it banking, credit cards or loans. Their job is not to know the future of technology, nor the latest and greatest of delivery networks, but to be focused on balancing the set of business needs, and choosing or creating the best possible solutions that can be provided from a technical perspective.* *On the one hand, the CIO has to be an advocate for the business into the technology world, and on the other hand, the voice of technology in the best respect of how it can respond to the business. This is a relatively new role and the challenge is to interpret and prioritise correctly the business needs and make the technology systems really responsive. The CIO is expected to be involved not only in strategy development, but also in business and product innovation. Now, more than ever, CIOs are being held accountable for driving the business value, not just for keeping the lights blinking on the computers.* Capital One has used Internet technology so that customers can apply for and service their credit cards online – the concept of 'web self-service'. In their Report, Capital One stressed their commitment to technology to support a strategy based on a superior customer experience when they stated: *Our brand is not defined by our television commercials. It is defined by the quality of our products and our customer experience. At Capital One, our brand is premised on empowering our customers with informed choice, great value, and excellent service. We are building on our heritage of bringing our customers great value without the hassle by investing in our customer experience to drive ongoing customer loyalty.* *We also are investing in world-class customer infrastructure, such as CRM and enhanced online servicing capabilities. These investments will enable us to provide all of our national and local customers with better products at lower cost. We have a franchise of over 50 million customer accounts and 36 million unique customers. We interact with our customers around 300 million times a year, not counting the billion times they use our cards. I am grateful for our customers' loyalty, and our job is to sustain and build on it to make Capital One the best choice for all their banking needs. In 2007 we introduced SmartSwitch,, which enables our customers to reliably and easily move their entire banking relationship from another bank to Capital One, including the seamless transfer of electronic bill pay information. We also have one of the best customer experiences in commercial banking, achieving some of the highest scores in the industry for client loyalty.*	15	CO4

	Questions		
	a) Explain how Capital One has achieved competitive advantage through creating value through e-business. b) Prepare the SWOC matrix for Capital One. c) What are the social, ethical and legal issues the Company has to face for its e-business?		
Q19	**Case Study 2 – Process Management to make e-business simpler** Steven S. Smith, chief technology officer for the US bank Wells Fargo Financial, introduced his company to business process management last year. Note how he did it: 'I didn't go to our divisional chief executive and say: "We are going to invest in this tool". Instead, we brought the technology in and worked together with the business on a specific issue. It was the business manager who presented to the divisional CEO. He said: "Look at the benefits of this new technology"'. 'All the IT people were sitting in the room with big smiles on their faces. They didn't have to say a word. It was the business bragging about how wonderful it is', he says. When the business side of an organization has good things to say, unprompted, about a new technology, something unusual is happening and, for many companies, that something is business process management. It is a methodology underpinned by a technology and it is a hot ticket. Accenture, the world's largest consultancy, already has a global director for BPM, Jim Adamczyk. He describes it as a mindset: 'It is something that has mostly been going on for a long time. What has changed is the convergence of the business need for process engineering with the evolution of technology that lets people build systems flexible enough to supply the need.' In a new book, Kiran Garimella, Michael Lees and Bruce Williams (2008) of Software AG, the European consultancy, say that BPM represents a culmination of all the collective experience, thinking and professional development in business management over the past several decades. 'It's customer first. It's business focused, it empowers people in all corners of a business to be more successful. It brings people and systems together. BPM is where all the lofty goals and best strategies are coming home to roost', they say. It sounds too good to be true and it has already attracted the attention of a string of software houses and consultancies from the 'pure play' vendors such as Pegasystems, Savvion and Lombardi at one end to the big 'stack' vendors including Oracle and IBM at the other. It is easy to see why Mr Adamczyk worries: 'I fear that this is being hyped as one of our endless series of silver bullets, but at core we are trying to align the domain of the business – what the business needs – with what IT can understand and build.' What is driving the adoption of BPM? Ram Menon, head of worldwide marketing for the pure play vendor Tibco, argues that increasing business complexity is the chief cause: 'At the core, it's about agility, efficiency and productivity. Businesses are continually under pressure to get more work done with fewer resources. 'Regulatory compliance is another driver. Rules such as the European Union's Markets in Financial Instruments directive (MiFID) and Sarbanes-Oxley in the US have a significant process dimension. In healthcare, it's HIPAA. Almost every industry has its list of compliance requirements. 'Used appropriately, BPM helps companies streamline processes, reduce cycle times and get things done faster. This frees employees to focus on areas where they can add real value.' BPM provides the tools to enable organizations to examine, analyse and improve their processes, with a process being anything that transforms resources and materials into products or services. 'This transformation is how a business works; it's the magic elixir of the enterprise', say the Software AG authors. 'The more effective this transformation, the more successfully you create value.' BPM software provides the technological underpinning that facilitates communication and mobility of data across applications. Only in the past few years has the software become mature enough to be used reliably for this purpose. There are four main phases: process analysis, process design, process automation and business activity monitoring – which provides the feedback for further improvements. Here are two examples of BPM in action. University College London Hospitals comprises seven large hospitals in central London treating hundreds of thousands of in and out-patients each year through a bewilderingly large number of specialisms. Government targets demand that no more than 18 weeks elapse between first referral and the start of treatment.	**15**	**CO3**

James Thomas, UCLH IT director, knew the existing manual methods of tracking patients through what are known as 'care pathways' could not cope. He wanted to introduce technology that would enable tracking by exception. Only if a staging post on the care pathway failed – a missing laboratory report, for example – would a warning flag be raised. The UCLH system sends an e-mail to the individual responsible to alert them to the deficiency. In conjunction with Logica CMG, the consultancy, Mr Thomas used BPM software from Lombardi to map the care pathway for a single specialism, discovering in the process that the first and last thirds of the process are identical. The middle third depends on the particular specialism involved. Business activity monitoring (BAM) software was used to monitor the progress of the patient along the pathway. 'It's your conscience. It's an incredibly good policeman', Mr Thomas says. The system will be live across one hospital in the group by the end of this month; the whole of UCLH by the end of the year. But it has not been easy: 'Getting people to acknowledge that they work to processes and to document those processes and then work through harmonising those processes is not easy. You're talking about administrative and clinical staff in different hospital buildings. 'Potentially, people might see this as a form of electronic Big Brother that sends them e-mails when they haven't done something. We have to turn that on its head and say the task facing us is too big for our current way of working – this is something to help us break up and digest the problem.' At Wells Fargo Financial, Mr Smith was concerned that it was taking too long to complete certain business processes. The test bed for the BPM software that he brought in was the process that tracked the answers the bank gave customers who asked for a loan. 'The specific issue was: how to track the salesperson's response to the customer after a decision had been made on a loan. If the customer failed to take up the loan even if it was approved, what was the reason', Mr Smith says. Tracking the process manually would have required hiring another 20 staff across the US; four were already in place.

The BPM software took four months to install – Mr Smith blames the delay on his team's reluctance to use 'agile' development methods rather than the tried and tested 'waterfall' technique – but it resulted in automating the process for the whole of North America using three rather than the four existing staff. The bank has implemented a number of BPM systems after that first deployment. In one, the process for adding a new merchant to the bank's private label credit card product, which used to take weeks now takes only a day or so. Mr Smith says that, with so many BPM vendors, it is important to choose the most appropriate by bringing them into the facility and asking them to interface with the existing systems.These two examples demonstrate important principles of BPM deployment.

First, the need to start in a small way – a single process such as Mr Thomas's patient care pathway or Mr Smith's loan agreement is enough for proof of concept. Second, the need to capture the hearts and the minds of the people who have to use the system. Mr Thomas insisted, for example, that hospital staff would not have to use new techniques or undergo extra training to make full use of the system.Rod Favaron, chief executive of Lombardi, says companies will see three kinds of benefits from BPM, properly deployed: effficiency, effectiveness and agility.'In the era of Service Oriented Architecture and on-demand market messages, agility is a well understood concept. In the world of process management, the ability to change quickly is essential', he says. 'Customers on average change their key processes between four and seven times a year. New opportunities can arise. New partners or customers need you to support a different way of doing business. 'Government regulations can require companies to change their processes. BPM provides the platform they need to be able to change processes faster and in a more controlled fashion than any other option.'

Questions

a) How does the article suggest that business thinking and practice has evolved since the exhortations for business process re-engineering in the 1990s?
b) Summarize the benefits for BPM discussed in the Case.
c) Discuss the need for a concept such as BPM when all new information systems and e-business initiatives are ultimately driven by process improvement.