**Week 3 Submission – Information Systems Within the Organisation**

*32557 – Enabling Enterprise Information Systems*

CB11.B3.101

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**Answers:**

1. A transaction processing system (TPS) is a vital component in the efficient management of routine business transactions component in the efficient management of routine business transactions within an organization. By leveraging computer technology, TPSs are designed to automate and streamline daily operations, facilitating the rapid and accurate processing of high volumes of data. This enables the seamless execution of various transactional tasks, such as order fulfilment, and ensures the secure storage of sensitive information in a database. Authorized users can access and retrieve relevant data through a database management system (DBMS), promoting enhanced accessibility and productivity. The primary objective of a TPS is to ensure the efficient and secure processing of routine transactions, thereby enhancing the overall efficiency of an organization's operations. To enhance our comprehension of TPS, let us consider a practical example involving a bank's Automated Teller Machine (ATM) system. This example will be elucidated following with the Figure 1.

**Example: Bank ATM**

**Inputs:**

* The customer's bank card, which functions as a physical token to access their financial account.
* The Personal Identification Number (PIN), a secure code entered by the customer to authenticate their identity.
* The transaction details, which include the actions the customer wishes to perform, such as withdrawals, deposits, or balance inquiries.

**Processes:**

1. The transaction begins when the customer inserts their bank card into the ATM, initiating the TPS sequence.
2. The ATM prompts the customer to input their PIN, which is then encrypted and verified to ensure security and privacy.
3. After successful authentication, the customer selects the desired transaction type, such as a withdrawal or balance inquiry.
4. The ATM communicates in real-time with the bank's database, verifying the customer's account details and transaction limits.
5. Upon verification and within the set limits, the ATM dispenses cash or processes deposits as requested by the customer.
6. The ATM sends a request to update the transaction details in the bank's central database, reflecting the changes made by the transaction.

**Outputs:**

* Cash is dispensed to the customer for withdrawal transactions.
* A receipt is printed upon request, serving as a tangible record of the transaction for the customer's reference.
* The customer's account balance is updated to include the recent transaction, ensuring that their financial records are current.

도표, 텍스트, 평면도, 스크린샷이(가) 표시된 사진

자동 생성된 설명

Figure 1. Flow chart for understanding TPS of bank ATM

In conclusion, transaction processing systems such as those utilized within banking automated teller machines hold vital functions in facilitating commercial interactions. They ensure precision, effectiveness, and protection, improving the general customer experience.

1. Functional Area Information Systems (FAIS) is the Information system within a specific department of the organization. For example, Marketing IS, Human Resources IS, Financial IS, Production and operation management, etc. Numerous business processes have been performed, based on the specialties of each department. For instance, the Marketing department has been using transaction data for forecasting advertisements.

**2.1 Customers Relationship**

**The company reputation has been affected by marketing task. Mostly, relate to customer satisfaction. To secure that company still sustain the good conditions with customers. The organisation has created plan which support relationships with customers that call “Long-Term Sustainable Customer Relationships” (studysmarter, n.d.).**

**Customer relationship management is the whole operation of making participation and with customer (studysmarter, n.d.), contain with 5 primary goals consist of:**

* Increase customer value perception
* Increase customer satisfaction and mitigate customer dissatisfaction
* Engage customers through brand management and marketing communications on various channels
* Promote customer-generated marketing

**2.2 Digital Advertising**

**People are surrounded by digital environment. To catch customers attention, organization require to launch digital advertisement that reach to target group of customers. Examples are:**

* Social media advertising via online platform such as Facebook and Instagram
* Email Direct Messages (EDM): email promotion of the week
* Push notifications: in-app notifications form partner platform
* Online promotion through ad and video

**In purpose of creating engagement on company products and services to customers, marketer receive various opportunity to track and analyse customers behaviour for finding insight for making decisions.**

**According to studysmarter(n.d.), Marketing Information Systems (MIS) is a related method and process for enhancing decision-making from many different sources of data including internal sources such as records and external databases that consist of collection, analysis, transformation, and interpretation. For instance, new products and services are made based on the insight that comes from the preferences of customers' buying habits.**

**Marketing processes have taken place considering customer and what market want. To ensure that the task will be performed correctly, then research takes account of vital roles in enriching their options. Marketing research, one of business process applies statistical methods to internal and external data that have been collected, transformed, evaluated, and interpreted to generate Customer driven strategy to achieve specific tasks such as campaigns, advertising, and promotion for specific group of customers. The related field that research could involve is the marketing environment. Examples are Competitor strategies and customer satisfaction.**

**In conclusion, the entire organisation has been driven by business processes that are supported by outstanding of information system. To ensure that business processes are performing correctly, the organisation has been released objectives to match with each specific task.**

1. One of the most famous sports and fashion companies that has experienced a failed ERP implementation in their history is Nike. According to Dolfing (2022), Nike faced immense growth in 1999, with ambitious goals and powerful branding, they secured a leading position worldwide, including in the Asian market. However, this rapid expansion caught Nike unprepared for the need to plan and implement resource planning to match the scale of growth. Nike endeavoured to be a breakthrough innovator, attempting the first-ever ERP model in the given field. Opting for a centralized approach, where design, factory organization, and order management were controlled from Nike's headquarters in Oregon, proved to be a significant flaw. Here are some of the analyses of what went wrong:

**3.1 Lack of Preparation for and Underestimation of Growth**

Nike's rapid growth in 1999 was not accompanied by adequate preparation or planning for resource planning to align with this significant expansion. The failure to foresee the need for an efficient Enterprise Resource Planning (ERP) system to handle the increased scale of operations was a critical oversight. Nike's overconfidence and underestimation of the size of their growth played a pivotal role in the failure. They believed their strong market position could overcome any challenges, leading to overconfident investments in the ERP model. This lack of realistic evaluation resulted in development costs soaring to approximately 400%, reaching $400 million from the initial estimate of $10 million. Nike's decision to adopt a centralized ERP approach proved to be a significant weakness. The overconfidence in their alpha as well as big brand position and the assumption that it could handle any complexity along the way contributed to the failure.

**3.2 Hasty System Merging of Two Big Brands with Different Systems**

**Nike chose i2 as its supply chain partner to develop a ground-breaking ERP system. i2 was renowned for its history in logistics software, experiencing substantial year-over-year growth. Conversely, Nike was a major player in the athletic and fashion industry. Both companies were confident in their partnership, aiming to enhance their leading positions in the new software supply chain management landscape at that time. Unfortunately, they failed to recognize the stark differences in rules and data formats within their respective database systems. This oversight resulted in numerous challenges, including system crashes and errors in handling the vast data associated with Nike's millions of orders and product numbers. Eventually, these weaknesses were identified, causing a slowdown in system development and customization, leading to project delays and increased costs.**

**3.3 Inadequate Communication as a Business Partner**

The failure was exacerbated by a lack of effective communication between Nike and i2. Both companies failed to inform each other of issues along the way, leading to a blame game where fault was shifted between the two. This communication breakdown hindered problem-solving and resolution during the ERP implementation process. I2 initially set 10-15% as the maximum figure for their system's capability in handling customization during the merging process. Unfortunately, Nike did not adhere to the recommendation due to its massive database, leading to a slowdown in system performance. This issue as well as the expectations between the two companies were not communicated effectively, and ultimately in the end, both companies shifted the blame to each other.

1. Oracle enhances its Cloud SCM Fusion with updates to Transportation Management and Global Trade Management apps, introducing advanced business intelligence, improved logistics network modeling, a new trade incentive program, and an updated mobile app. The expanded business intelligence integrates transportation and trade data for swift decision-making. Enhanced logistics modeling aids in optimizing fleet performance. The new trade incentive program automates support for country-specific trade programs. Mobile app updates include third-party transportation provider support, enabling users to bid on spot market shipments. Gartner forecasts a rise in SCE software spending, rating Oracle's Transportation Management software ahead of competitors.
2. Our answer is yes and there are two reasons:

**5.1. Increasing student portfolio**

In today’s academic environment, universities must develop strategies to expand student enrollment across different higher education levels. This involves offering a diverse portfolio of services and implementing effective relationship management tools. The objective is to achieve financial prosperity through self-funding initiatives while addressing strategic challenges similar to corporate organizations. University administrators play a crucial role in resource allocation to ensure the institution's mission is met. Various stakeholders, including students, donors, faculty, staff, and governing boards, have specific expectations for university success.

**5.2. Retaining old and new students**

Retaining old and new students in higher education has become a significant business focus, with consulting companies specializing in boosting universities’ retention rates. Methods include conferences, publications, and surveys to assess engagement. While improving retention is crucial, the ultimate goal is graduating students prepared for further studies or the job market. Additionally, higher education plays a vital role in fostering national competencies and workforce development. Accessible higher education can enhance national economies in the global job market, potentially reducing unemployment among skilled workers.

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