Higher Nationals

Internal verification of assessment decisions – BTEC (RQF)

INTERNAL VERIFICATION – ASSESSMENT DECISIONS			
Programme title	BTEC Higher National Diploma in Computing		
Assessor	Mr.Isuru Kulathilaka	**Internal Verifier**	Mr .Lakindu Premachandra
Unit(s)	**Unit 07: Strategic Information Systems**		
Assignment title	Identifying and evaluating SIS for a chosen organization		
Student's name	Ranudi Gayathmie Kariyapperuma		
List which assessment criteria the Assessor has awarded.	**Pass**	**Merit**	**Distinction**

INTERNAL VERIFIER CHECKLIST		
Do the assessment criteria awarded match those shown in the assignment brief?	Y/N	
Is the Pass/Merit/Distinction grade awarded justified by the assessor's comments on the student work?	Y/N	
Has the work been assessed accurately?	Y/N	
Is the feedback to the student: Give details: • Constructive? • Linked to relevant assessment criteria? • Identifying opportunities for improved performance? • Agreeing actions?	Y/N Y/N Y/N Y/N	
Does the assessment decision need amending?	Y/N	
Assessor signature		Date
Internal Verifier signature		Date
Programme Leader signature (if required)		Date

Confirm action completed		
Remedial action taken Give details:		
Assessor signature		Date
Internal Verifier signature		Date
Programme Leader signature (if required)		Date

Higher Nationals - Summative Assignment Feedback Form

Student Name/ID	Ranudi Gayathmie Kariyapperuma - KIR/X-00104243		
Unit Title	Unit 07: Strategic Information Systems		
Assignment Number	1	Assessor	Mr.Isuru Kulathilaka
Submission Date	8.10.2023	Date Received 1st submission	
Re-submission Date		Date Received 2nd submission	

Assessor Feedback:

LO1 Analyse the information requirements of organisations

Pass, Merit & Distinction Descripts	P1 ☐	P2 ☐	M1 ☐	D1 ☐

LO2 Discuss the types of information systems that are used within all levels of an organisation

Pass, Merit & Distinction Descripts	P3 ☐	P4 ☐	M2 ☐	D2 ☐

LO3 Demonstrate the use of an information system to produce management information

Pass, Merit & Distinction Descripts	P5 ☐	P6 ☐	M3 ☐	D3 ☐

LO4 Evaluate the effectiveness of strategic information systems

Pass, Merit & Distinction Descripts	P7 ☐	M4 ☐	D4 ☐

Grade:	Assessor Signature:	Date:

Resubmission Feedback:

Grade:	Assessor Signature:	Date:

Internal Verifier's Comments:

Signature & Date:

* Please note that grade decisions are provisional. They are only confirmed once internal and external moderation has taken place and grades decisions have been agreed at the assessment board.

Pearson Higher Nationals in

Computing

Unit 07: Strategic Information Systems
Assignment 01

General Guidelines

1. A Cover page or title page – You should always attach a title page to your assignment. Use previous page as your cover sheet and make sure all the details are accurately filled.
2. Attach this brief as the first section of your assignment.
3. All the assignments should be prepared using a word processing software.
4. All the assignments should be printed on A4 sized papers. Use single side printing.
5. Allow 1" for top, bottom , right margins and 1.25" for the left margin of each page.

Word Processing Rules

1. The font size should be **12** point, and should be in the style of **Time New Roman**.
2. **Use 1.5 line spacing**. Left justify all paragraphs.
3. Ensure that all the headings are consistent in terms of the font size and font style.
4. Use **footer function in the word processor to insert Your Name, Subject, Assignment No, and Page Number on each pag**e. This is useful if individual sheets become detached for any reason.
5. Use word processing application spell check and grammar check function to help editing your assignment.

Important Points:

1. It is strictly prohibited to use textboxes to add texts in the assignments, except for the compulsory information. eg: Figures, tables of comparison etc. Adding text boxes in the body except for the before mentioned compulsory information will result in rejection of your work.
2. Avoid using page borders in your assignment body.
3. Carefully check the hand in date and the instructions given in the assignment. Late submissions will not be accepted.
4. Ensure that you give yourself enough time to complete the assignment by the due date.
5. Excuses of any nature will not be accepted for failure to hand in the work on time.
6. You must take responsibility for managing your own time effectively.
7. If you are unable to hand in your assignment on time and have valid reasons such as illness, you may apply (in writing) for an extension.
8. Failure to achieve at least PASS criteria will result in a REFERRAL grade .
9. Non-submission of work without valid reasons will lead to an automatic RE FERRAL. You will then be asked to complete an alternative assignment.
10. If you use other people's work or ideas in your assignment, reference them properly using HARVARD referencing system to avoid plagiarism. You have to provide both in-text citation and a reference list.
11. If you are proven to be guilty of plagiarism or any academic misconduct, your grade could be reduced to A REFERRAL or at worst you could be expelled from the course

Student Declaration

I hereby, declare that I know what plagiarism entails, namely to use another's work and to present it as my own without attributing the sources in the correct form. I further understand what it means to copy another's work.

1. I know that plagiarism is a punishable offence because it constitutes theft.
2. I understand the plagiarism and copying policy of Pearson UK.
3. I know what the consequences will be if I plagiarise or copy another's work in any of the assignments for this program.
4. I declare therefore that all work presented by me for every aspect of my program, will be my own, and where I have made use of another's work, I will attribute the source in the correct way.
5. I acknowledge that the attachment of this document signed or not, constitutes a binding agreement between myself and l Pearson UK.
6. I understand that my assignment will not be considered as submitted if this document is not attached to the assignment.

ranudigk@gmail.com
Student's Signature: **Date: 8.10.2023**
(*Provide E-mail ID*)   (*Provide Submission Date*)

Higher National Diploma in Computing

Assignment Brief

Student Name /ID Number	Ranudi Gayathmie Kariyapperuma - KIR/X-00104243
Unit Number and Title	**Unit 7: Strategic Information Systems**
Academic Year	2021/2022
Unit Tutor	Mr.Isuru Kulathilaka
Assignment Title	Identifying and evaluating SIS for a chosen organisation
Issue Date	11.08.2023
Submission Date	8.10.2023
IV Name & Date	

Submission format
Report: The submission should be in the form of an individual written report. This should be written in a concise, formal business style using 1.5 line spacing and font size 12. You are required to make use of headings, paragraphs and subsections as appropriate, and all work must be supported with research and referenced. Provide in-text citations and the reference list using Harvard referencing system. The recommended word limit is 4000 words, although you will not be penalised for exceeding the total word limit.

	Unit Learning Outcomes:
	LO1: Analyse the information requirements of organisations.

LO2: Discuss the types of information systems that are used within all levels of an organisation.

LO3: Demonstrate the use of an information system to produce management information.

LO4: Evaluate the effectiveness of strategic information systems. |

	Assignment Brief and Guidance:

Scenario

The success of any organisation is depends on the how data and information is captured, processed, utilised and output. Information generated within the organisation can be used to gain oraganisational efficiency, productivity and improved business decision making. Modern organisations are heavily rely on use of Business information systems to generate and disseminate desired information throughout the organisation.

Assume that you have been recruited as the associate business analyst for the organisation and you have been asked to prepare a management report to the top management by highlighting the importance of using information systems to generate productive results.

The organisation could be based on your own work environment or an organisation that you have a knowledge and understanding about.

In this report you are required present the profile of the organization indicating the vision, mission, objectives and organizational chart.

Activity 01

- Discuss the information needs of the main functional departments of the selected organisation and compare different processing activities that happen within the functional departments. your answers should be supported with the examples taken from the selected organizational context.

- Produce an Input/out diagram to represent the data and information requirements of each functional department of the chosen organization and evaluate integration of data and information by considering input, output and processing activities of the organization,s departments/functions.

Activity 02

- Identify and describe information systems that can be implemented to the chosen organization with an explanation to the functionalities of each. You also are required to differentiate the identified information systems between management levels and functional areas of the organization based on their functions and purpose. Illustrate your answer with examples.

- Discuss the information needs required at operational, tactical and strategic level of the organization with an analysis on how the effectiveness of each management level can be improved with the support of the information systems suggested by you.

Activity 03

- "Availability of current, valid, accurate data and information is absolutely important to an organization"

  Discuss the above statement with relevant to the context of the chosen organization and critically evaluate with examples, how such information can be used for effective decision making and forecasting in the organization.

- Demonstrate the use of an information system for management reporting purposes and analyze the constraints that the organization may face when gathering data and information for management reporting.

Activity 04

- Identify and explain different models that can be applied to strategic information systems and evaluate and justify how the chosen organization can use strategic information systems to gain a competitive advantage in the global market using the models identified. You are also required to evaluate how strategic information systems can contribute to the competitiveness of organisations. Support your answer with relevant examples, illustrations and explanations.

ACKKNOWLEDGEMENT

At last author would like to share the experience while doing the project. Author learns many new things about the projects. The best thing which author can share is that author developed more interest in this subject. This Module gave an interest to the author to find more information about it. .

A very special thanks to Mr. Isuru Kulathilaka who teach us this subject and Author thanks for who helped author to do this kind of project. Thank you!

Regards,

The author,

 Ranudi Kariyapperuma.

Table of Contents

Table of Figures

List Of Table

Activity 01

Description of the Organization

Maliban Manufactories (Pvt) Limited

The well-known Sri Lankan business Maliban Biscuit Manufactories (Pvt) Ltd., also referred to as Maliban, specializes in the manufacture of biscuits and other confections. Known for its superior products and market presence, Maliban was established in 1954 by Angulugaha Gamage Hinnyappuhamy Abdul Caffoor and has since grown to become one of Sri Lanka's top biscuit producers.

The company offers a wide variety of biscuit products, such as cream biscuits, wafers, crackers, and health-conscious biscuits, to suit different palates and preferences. Maliban now offers a wider range of products, including chocolates, snacks, and other confections.

Figure 1 : Maliban Manufactories LOGO

Maliban has developed a reputation over time for its dedication to quality, utilizing cutting edge technology and strict quality control procedures in its manufacturing processes. To guarantee the freshness and dependability of its products, the company places a strong emphasis on using high-quality ingredients and complies with food safety regulations.

By implementing eco-friendly procedures into its business operations, Maliban has additionally demonstrated an interest in environmental sustainability. Initiatives like responsible waste management and energy-efficient manufacturing methods are examples of how this devotion is frequently demonstrated.

In addition to gaining a sizable portion of the Sri Lankan market, Maliban has increased its global footprint by exporting its goods to other nations thanks to its wide distribution network.

The company's attention on consumer preferences, creativity in product creation, high-quality snack production, and a strong commitment to providing value to customers are all factors in its success.

History of Maliban Manufactories (Pvt) Limited

Figure 2 : Company of Maliban

A well-known and established business in Sri Lanka, Maliban Biscuit Manufactories (Pvt) Ltd. is well-known for its biscuit and confectionery products. An outline of Maliban's historical path is provided below:

1954 - Foundation Angulugaha Gamage Hinnyappuhamy Abdul Caffoor, also referred to as A.G.H. Abdul Caffoor, established the business in 1954. His goal while starting the business was to provide biscuits of the highest caliber for the Sri Lankan market.

Early Years In a little bakery in Dehiwala, Sri Lanka, Maliban began operating. During the company's first stages of operation, it made a small selection of biscuits and concentrated on providing high-quality and delicious items.

Growth and Expansion Maliban progressively increased the scope of its product line and widened its market penetration by committing to quality and innovation. The company's cream biscuits, crackers, wafers, and other confections helped it become well-known.

Innovation and Adaptation Maliban has proven its capacity to adapt over time by introducing new technology into its production procedures while upholding a strict commitment to employing premium ingredients.

Growth and Expansion Maliban progressively increased the scope of its product line and widened its market penetration by committing to quality and innovation. The company's cream biscuits, crackers, wafers, and other confections helped it become well-known.

Innovation and Adaptation Maliban has proven its capacity to adapt over time by introducing new technology into its production procedures while upholding a strict commitment to employing premium ingredients.

Product category of Maliban

Figure 3 : Product Category of Maliban

Vision and Mission of the Company

Vision

"To be the most successful and respected Biscuit company in Sri Lanka."

Mission

"To win the Hearts and Minds of Consumers by delivering food propositions with
exceptional quality, safety & value whilst being environmentally & socially responsible,
creating employee satisfaction and returning optimum value to stakeholders."

Functional Departments of Maliban Company

As a food production company, Maliban probably has a number of functional departments that
are essential to its business operations. A normal food manufacturing business like Maliban
would have several key functional departments, such as:

Department	Definition
Production/Manufacturing	In charge of monitoring the actual production of biscuits and other food goods, making sure that safety regulations are followed and that efficiency and quality control are maintained.
Research and Development (R&D)	focuses on creativity, developing new items, creating recipes, and enhancing current products to satisfy consumer needs.
Quality Assurance/Quality Control	Ensures, through testing, inspection, and quality control procedures at various phases of manufacturing, that products satisfy internal quality benchmarks and regulatory standards.

Supply Chain and Logistics	Controls the flow of raw materials, keeps an eye on inventories, works with suppliers, and makes sure that completed goods are delivered to clients quickly and effectively.
Sales and Marketing	Manages distribution channels, advertising, promotions, market research, customer interaction, sales tactics, and promotions in order to grow market share and brand awareness.
Finance and Accounting	Oversees the management of financial transactions, forecasting, budgeting, and financial reporting in order to guarantee the company's financial stability and legal compliance.
Human resources	In charge of hiring, training, managing employee relations, administering benefits, and creating a healthy work environment .
Information Technology	Oversees the organization's hardware, software, networks, and cybersecurity infrastructure to ensure data security and operational effectiveness .
Legal and Compliance	Oversees contract management, legal matters, risk mitigation, and compliance with laws and regulations.

Table 1 : Functional Departments of Maliban Group

Needed information of each department and the reasons that needed

Department	Production/Manufacturing	
Needed Information	**Reason**	**Activities**
Information about equipment maintenance manufacturing schedules quality measurements raw material inventory	guarantee effective output allocate resources. keep up product quality avoid downtime.	Planning scheduling quality control inventory management in manufacturing.

Department	Research and Development (R&D)	
Needed Information	**Reason**	**Activities**
Various sources of market trends technological advancements consumer preferences competitive analyses scientific research data	To drive innovation create new products improve existing ones stay ahead of market trends contribute to the company's competitive edge by developing cutting-edge solutions.	Conducting market research analyzing technological advancements experimenting with new concepts creating prototypes, testing, iterating on designs

industry-specific innovations.		collaborating with other departments for implementation.

Department	Quality Assurance/Quality Control	
Needed Information	**Reason**	**Activities**
Quality standards testing reports compliance documentation.	To ensure products meet quality benchmarks comply with regulations maintain consistency.	Quality testing inspection compliance monitoring documentation.
Department	Supply Chain and Logistics	
Needed Information	**Reason**	**Activities**
Supplier details inventory levels transportation data distribution plans	To manage the supply chain Efficiently prevent stockouts ensure timely delivery	Supplier management inventory control logistics planning distribution coordination.

Department	Sales and Marketing	
Needed Information	**Reason**	**Activities**
Market research sales metrics customer feedback campaign analytics.	To understand customer needs drive sales and formulate effective marketing strategies..	Market analysis sales tracking customer engagement campaign management

Department	Finance and Accounting	
Needed Information	**Reason**	**Activities**
Financial statements budgets forecasts tax compliance data.	To manage finances make informed decisions comply with regulations plan budgets.	Financial reporting budgeting forecasting tax filings compliance checks..

Department	Human Resources	
Needed Information	**Reason**	**Activities**
Employee data training records payroll benefits information. distribution plans.	To manage workforce foster employee development ensure fair compensation maintain HR compliance.	Recruitment training performance management payroll administration.

Department	Information Technology (IT)	
Needed Information	**Reason**	**Activities**
System performance metrics incident reports cybersecurity measures..	To maintain IT infrastructure secure data support operational efficiency.	System maintenance cybersecurity troubleshooting data security.
Department	Legal and Compliance	
Needed Information	**Reason**	**Activities**
Regulatory updates contracts compliance records risk assessments.	To ensure legal compliance manage risks safeguard the company's interests.	Compliance checks contract management risk assessment legal support.

Table 2 : Activities and needed information for the departments of dialog company

I/O diagrams of each department

I/O Diagrams for Production/Manufacturing

Input	Process	Output
Raw Materials	Procurement, Inventory Management	Inventory of Raw Materials
Labor	Production	Manufactured Products
Machinery and Equipment	Manufacturing	Finished Goods Inventory
Energy Sources	Production	Energy Utilization Report
Packaging Materials	Packaging	Packaged Products
Quality Control Measures	Quality Assurance	Quality Checked Products
Marketing Strategies	Marketing	Marketed Products and Campaigns

Table 3 : I/O Diagrams for Production/Manufacturing

I/O Diagrams for Research and Development

Input	Process	Output
Market Trends/Data	Research Studies, Experimentation	New Product Concepts, Prototypes, Research Reports
Skilled Personnel	Product Development	Innovations, New Technology, Intellectual Property
Funding/Resources	R&D Planning, Testing	Research Findings, Patents, R&D Budgets
Equipment and Technology	Testing, Analysis	R&D Reports, Updated Technology

Table 4 : I/O Diagrams for Research and Development

I/O Diagrams for Quality Assurance/Quality Control

Input	Process	Output
Raw Materials	Inspection, Testing, Compliance	Quality Control Reports, Compliance Certifications
Quality Standards	Audits, Calibration	Standard Adherence Reports, Calibration Records
Personnel Training	Quality Checks, Audits	Trained Staff, Quality Improvement Plans
Inspection Equipment	Testing, Analysis	Inspection Reports, Quality Metrics

Table 5 : I/O Diagrams for Quality Assurance/Quality Control

I/O Diagrams for Supply Chain and Logistics

Input	Process	Output
Supplier Data	Procurement, Vendor Selection	Supplier Contracts, Vendor Performance Reports
Inventory Information	Inventory Management, Demand Forecasting	Stock Levels, Inventory Reports
Transportation Resources	Logistics Planning, Route Optimization	Shipping Schedules, Delivery Performance
Warehouse Facilities	Storage, Distribution	Inventory Management Reports, Distribution Records

Table 6 : I/O Diagrams for Supply Chain and Logistics

I/O Diagrams for Sales and Marketing

Input	Process	Output
Market Research Data	Campaign Planning, Target Audience Analysis	Marketing Strategies, Customer Segmentation
Sales Team Efforts	Sales Calls, Client Meetings	Sales Reports, Customer Relationship Management
Marketing Budget	Advertising, Promotions	Marketing Campaigns, Ad Performance Metrics
CRM Software	Lead Management, Customer Follow-up	Sales Pipeline Data, Customer Retention Reports

Table 7 : I/O Diagrams for Sales and Marketing

I/O Diagrams for Finance and Accounting

Input	Process	Output
Financial Transactions	Bookkeeping, Transactions Processing	Financial Statements, Transaction Records
Budgets and Forecasts	Financial Planning, Forecasting	Budget Reports, Financial Projections
Tax and Compliance Data	Tax Preparation, Regulatory Compliance	Tax Filings, Compliance Reports
Financial Software	Accounting Processes, Reporting	Financial Analysis Reports, Audit Trails

Table 8 : I/O Diagrams for Finance and Accounting

I/O Diagrams for Human Resources

Input	Process	Output
Job Applications	Recruitment, Screening	New Hires, Candidate Database
Training Programs	Employee Development	Trained Workforce, Training Records
Payroll Information	Payroll Processing, Benefits Administration	Payroll Reports, Benefit Statements
HR Policies/Guidelines	Policy Implementation, Compliance	Employee Handbook, Compliance Reports

Table 9 : I/O Diagrams for Human Resources

I/O Diagrams for   Information Technology

Input	Process	Output
Hardware and Software	IT Infrastructure Setup, Maintenance	Operational Systems, Software Applications
Data and Information	Data Management, Analysis	Data Reports, Insights, Business Intelligence
Security Measures	Cybersecurity, Risk Assessment	Security Protocols, Threat Reports
IT Support Staff	Helpdesk, Technical Support	Resolved Tickets, Support Documentation

Table 10 : I/O Diagrams for Information Technology

I/O Diagrams for   Legal and Compliance

Input	Process	Output
Laws and Regulations	Legal Review, Analysis	Compliance Guidelines, Regulatory Updates
Company Policies	Compliance Assessment, Policy Development	Updated Company Policies, Code of Conduct
Legal Cases and Precedents	Legal Research, Case Evaluation	Legal Opinions, Case Summaries
Risk Assessment Reports	Risk Analysis, Mitigation Strategies	Risk Management Plans, Compliance Reports
Training and Education Material	Compliance Training, Workshops	Trained Staff, Compliance Certifications
Government Inquiries	Response Planning, Documentation	Responses to Inquiries, Compliance Records

Table 11 : I/O Diagrams for Legal and Compliance

Information Systems

Introduction

The foundation of contemporary organizations is made up of information systems, which coordinate the movement of people, data, and technology to promote productivity, creativity, and decision-making. Information systems are fundamentally complex networks of hardware, software, data, and procedures that collaborate to gather, process, store, and distribute information. They include various elements like as databases, networks, applications, and human knowledge interacting with this technology environment.

These technologies are essential to organizations because they give them access to real-time insights, facilitate streamlined processes, and promote smooth communication across international borders.They are the designers of revolutionary change, creating connections across divisions, stakeholders, and even continents to advance businesses toward competitiveness, responsiveness, and agility in the rapidly changing digital environment. Information systems are essentially dynamic enablers rather than merely technological infrastructures.

Different Types of Information Systems

- Transaction Processing Systems (TPS)

  These systems are the lifeblood of organizational functions. They are the backbones of daily operations, gathering, analyzing, and archiving standard data produced by vital operations such as order processing, sales, and inventory management. Databases are reliably updated and data is accurately recorded because to TPS's precision and efficiency in processing large quantities of transactions. These systems supply the fundamental data required for operational procedures like decision-making, hence laying the foundation for additional information systems. TPS essentially serve as an organization's operational backbone, ensuring that regular duties are carried out without delays.

- Management Information Systems (MIS)

The purpose of management information systems (MIS) is to support managerial decision-making at different organizational levels by gathering, processing, and presenting information. These systems compile information from various sources and convert it into insightful summaries, reports, and dashboards that help managers allocate, control, and plan their resources strategically. By providing managers with insights into performance indicators, trends, and forecasts, MIS help them make well-informed decisions that support organizational objectives. They offer an all-encompassing perspective of the company's activities, enabling effective administration among various divisions and roles.

- Decision Support Systems (DSS)

These specialized systems analyze data and offer interactive tools for weighing options in order to support complicated decision-making processes. These systems handle data from both internal and external sources using a variety of analytical models and algorithms, giving managers the ability to examine options and make well-informed decisions. DSS facilitate strategic planning, risk assessment, and problem-solving by enabling users to perform "what-if" analysis, simulations, and predictive modeling. They provide the means for decision-makers to consider all available options, assess the pros and drawbacks, and determine the best course of action.

- Executive Information Systems (EIS)

Designed specifically with top-level executives in mind, EIS provide real-time, summary information from multiple sources in an easy-to-use format. Key performance indicators (KPIs), trends, and high-level insights related to strategic decision-making are provided by EIS. Executives can keep an eye on organizational performance, spot new trends, and react swiftly to shifts in the market thanks to these tools. The primary goal of EIS is to support executives in their capacity as organizational visionaries and leaders by offering succinct, useful information.

- Functional Information Systems (HRIS, Accounting, Marketing, etc.)

Accounting, marketing, HRIS, and other functional information systems .Functions such as Human Resource Information Systems (HRIS), Accounting Information Systems, Marketing Information Systems, and others are served by functional information systems. The distinct information requirements of every department are met by each system, which facilitates decision-making within that field and streamlines procedures. For example, HRIS manages payroll, hiring, and employee data; Accounting Information Systems oversee financial transactions and reporting; and Marketing Information Systems support customer behavior tracking, market analysis, and campaign management. These customized systems streamline processes and offer pertinent data that is essential for certain departments to run smoothly

Functionalities and Purposes of Each Systems

Transaction Processing Systems (TPS)	
Functionalities	**Purpose**
These systems perform the essential functions of documenting and managing transactions inside an enterprise. TPS facilitates daily processes such as order processing, inventory management, and sales by collecting, validating, and storing data. Through the quick processing of enormous amounts of data, database maintenance, and transactional report generation, they guarantee the efficiency, correctness, and integrity of these transactions. The main purpose of TPS is to help the business's operational aspects by making sure that standard transactions are carried out precisely and on schedule.	The primary function of TPS is to manage and handle standard business transactions for an organization. The TPS's built-in features are designed to make sure that daily tasks like keeping track of sales, handling inventory, and processing orders are completed accurately and quickly. Maintaining data timeliness, correctness, and dependability in transactional processing is the core goal of TPS, which serves as the foundation for the organization's operational effectiveness

Table 12 : Transaction Processing Systems Functionalities and Purpose

Management Information Systems (MIS)	
Functionalities	**Purpose**
MIS systems make it easier for management to get, process, and disseminate the data required for strategic planning and decision-making. MIS functions include gathering data from several sources, processing that data into insightful reports and summaries, and displaying that data in the form of dashboards or other visual aids. Insights into organizational performance, trend forecasting, and the creation of periodic reports are all made possible by MIS. Giving managers accurate, timely, and pertinent information to assist efficient decision-making at all organizational levels is the primary purpose of MIS.	By offering timely, accurate, and pertinent information, MIS systems help managers make decisions more easily. The features of MIS are designed to gather information, turn it into insights that can be put to use, and then display it to managers in a way that makes it easier for them to plan, organize, and oversee organizational operations. MIS's main goal is to support managers across various levels by providing thorough insights into organizational performance, supporting strategic planning, and facilitating wise decision-making.

Table 13 : Management Information Systems Functionalities and Purpose

Decision Support Systems (DSS)	
Functionalities	**Purpose**
These tools are intended to help decision-makers assess complicated situations and reach well-informed decisions. Using analytical models and algorithms for scenario analysis, retrieving and evaluating data from many sources, and offering interactive tools for decision-making are all part of DSS's features. 'What-if' studies, simulations, and predictive modeling are made easier by DSS,	The purpose of decision support systems (DSS) is to help decision-makers assess difficult circumstances and arrive at well-informed decisions. Users can access, analyze, and understand data using the DSS's functions, and they can use analytical and modeling tools to investigate various choices. The goal of DSS is to provide decision-makers with

which helps with risk assessment, problem-solving, and strategic planning. DSS's main purpose is to provide decision-makers with the knowledge and resources they need to consider their options and come to well-informed conclusions in unpredictable or changing circumstances.

information, projections, and alternatives so they can plan strategically, solve problems, and make decisions when there is uncertainty or a combination of variables.

Table 14 : Decision Support Systems Functionalities and Purpose

Executive Information Systems (EIS)	
Functionalities	**Purpose**
These systems are designed to meet the unique information requirements of senior executives in a company. EIS functions include gathering information from several sources, condensing it into reports or key performance indicators (KPIs), and displaying it in ways that are easy for users to understand, such as dashboards or graphical representations. When required, drill-down analysis features in EIS allow users to examine specific data in detail. EIS's primary purpose is to give executives access to fast, condensed information so they can track organizational performance, spot patterns, and assist in making strategic decisions.	Executive Information Systems (EIS) are designed to meet the unique information requirements of senior executives. Key performance indicators (KPIs), trends, and high-level information are summarized and presented in an approachable way by the EIS's built-in features. By providing succinct and pertinent information, EIS seeks to assist executives in tracking organizational performance, seeing strategic possibilities, and taking prompt decisions.veness

Table 15 : Executive Information Systems Functionalities and Purpose

Functional Information Systems (HRIS, Accounting, Marketing, etc.)	
Functionalities	**Purpose**
By meeting their information demands, functional information systems assist particular departments within a company. Examples of functions that Human Resource Information Systems (HRIS) handle are payroll, hiring, performance reviews, and personnel data management. Accounting information systems oversee reporting, budgeting, and financial transactions. Through the management of customer data, analysis of market trends, and facilitation of marketing campaigns, marketing information systems support marketing activities. Every functional information system fulfills the needs of its respective department by offering customized features that expedite workflows and facilitate decision-making in that field.	Functional Information Systems provide features that are customized to meet the demands of particular departments within an organization. These systems aim to facilitate decision-making across all functional areas, manage data effectively, and streamline operations. For example, Accounting Information Systems concentrate on financial transactions and reporting, while HRIS supports HR activities by managing payroll, hiring, and employee data. Systems for managing consumer data and assessing market trends are provided by marketing information systems. Each functional system facilitates informed decision-making within its domain and optimizes operations to fulfill its departmental objective.

Table 16 : Functional Information Systems Functionalities and Purpose

Management Levels of an Organisation

An organization's management levels comprise a hierarchical structure that is essential for formulating strategies, making decisions, and carrying out operations. There are three levels which are defines in below :

Figure 4 : Management levels of an Organization

Operational Level

Decisions and daily activities at this level have a direct bearing on the organization's regular operations. It concentrates on carrying out particular duties successfully and efficiently. This level of management is responsible for supervising frontline staff, making ensuring procedures are followed correctly, and responding quickly to problems pertaining to sales, production, customer service, and other operational areas

Tactical Level

Falling between the operational and strategic levels, the tactical level makes medium-term decisions. Managers operating at this level convert strategic objectives into workable plans and guidelines. To accomplish particular goals, they do data analysis, assign resources, and create plans. Process optimization, increased productivity, and making sure that operational objectives line up with more general strategy directions are their main concerns.

Strategic Level

Setting long-term organizational goals and direction is the responsibility of the highest level of management, known as the strategic level. Determining the organization's goal, vision, and overarching plan is the responsibility of strategic managers. They weigh growth prospects, market trends, competition, and the company's place in the industry or market sector when making critical decisions that move the business closer to its long-term objectives.

The needed information for levels of the Maliban Company

1. Operational Level

The needed information for the Operational Levels are,

- Production Data - Information on machine efficiency, daily output, and measures related to quality control.
- Inventory Levels - Current warehouse status, reorder points, and stock levels.
- Sales and Customer Information - Daily sales totals, client comments, and order fulfilment specifics.

Example information that needed for maliban company in operational level

In Maliban, production floor supervisors need information on machine downtime, quality checks, and the quantity of biscuits produced throughout a shift in order to guarantee timely and constant product quality.

2. Tactical Level

The needed information for the Tactical Level

- Departmental budgets, expenditures, and cost analysis reports comprise the budgetary information.
- Market Trends - Competition analysis, statistics from market research, and regional sales figures.
- Resource Allocation - Reports on manufacturing efficiency, labor productivity, and the supply of raw materials.

Example information that needed for maliban company in Tactical level

in order to modify production schedules and marketing tactics, mid-level managers at Maliban require knowledge on market trends, such as consumer preferences for particular biscuit tastes or packaging.

3. Strategic Level

The needed information for the Strategic Level

- Long-Term Financial Forecasts - Investment Opportunities, ROI Analyses, and Projections.
- Global Market Insights - Business-related trends in emerging economies, global marketplaces, and geopolitical issues.
- Technological developments, R&D progress, and potentially disruptive shifts are examples of industry innovations.

Example information that needed for maliban company in Strategic level

At Maliban, in order to make decisions about investments in new manufacturing technologies or market expansions based on insights into the global market and industry developments, the company's top executives need access to long-term financial forecasts.

Use of an information system for management reporting purposes.

An information system, which makes it easier to collect, analyze, and present important data, is the basis of efficient management reporting for businesses like Maliban. This system in Maliban gathers data from several operational departments, including marketing, sales, and inventory, and processes it to derive insightful information. It makes use of analytics tools and algorithms to identify trends, patterns, and performance indicators.

After analysis, the data is turned into detailed reports that include textual summaries and visual components like graphs and charts. These reports give management a comprehensive perspective on important parameters, facilitating well-informed choices. Furthermore, because of the system's adaptability, managers can create customized reports that enable them to go deeper into particular information for examination. Reports must be accurate and timely in order to support Maliban's operational optimization and strategic planning. They must also be dependable and up to date.

Types of Reports and Examples for each report from the maliban company

- Sales Reports

Sales data is gathered by an information system from a variety of sources, including customer databases, internet platforms, and point-of-sale systems. After processing this data, sales reports are produced that include important indicators such as overall sales, product performance, customer segmentation, and sales trends across predetermined time frames. These reports provide insights on top-selling products, market trends, regional sales inequalities, and the efficacy of promotional programs through the use of graphical representations and textual summaries. They support decision-makers in figuring out where to grow, analyzing customer preferences, and optimizing sales tactics.

Example -

The information system at Maliban compiles information from a variety of sources, including customer databases, internet platforms, and retail sales terminals. After processing this data, the system provides thorough sales reports. Important data from these reports include overall sales numbers, product performance, sales distribution by location, and changes in customer

purchasing behavior. Maliban's sales statistics, for instance, can show that a certain product line has had a notable increase in sales in particular locations as a result of a focused marketing campaign. These reports—which are frequently given in graphical representations and include in-depth textual analysis—give Maliban's management the ability to pinpoint effective sales tactics, seize the opportunity to capitalize on in-demand goods, and modify marketing campaigns to suit customer preferences.

- Inventory Reports

By gathering information on stock levels, movements, and expenses, the information system keeps track of and manages inventory. Inventory reports that include current inventory levels, stock turnover rates, reordering points, and inventory expenses are created by compiling this data. These reports give an overview of the stock that is available, point out out-of-date or slow-moving items, and guarantee that there is an ideal stock level to satisfy demand. They provide management with the tools to make well-informed decisions on cost control, procurement, and inventory management through precise tables and graphical representations.

Example -

The information system used by Maliban keeps track of inventory expenses, movements, and levels on a continual basis. This data is compiled, and comprehensive inventory reports are produced. These reports provide an overview of inventory expenses, turnover rates, possible stock surpluses or shortages, and present stock levels. For example, the system may show that sales of a specific product are lagging, which would lead Maliban's management to plan out their advertising campaigns or reevaluate how much is being produced. These reports, which make use of tabular and graphical formats, help to minimize carrying costs, guarantee appropriate stock levels, and optimize inventory management.

- Market Forecast Reports

The information system creates market forecast reports by utilizing market trends, historical sales data, and predictive modeling. Future market trends, prospective sales volumes, developing market niches, and chances for expansion or diversification are all forecast in

these papers. These studies help management formulate long-term strategies, introduce new goods, penetrate new markets, or modify marketing campaigns to correspond with expected market movements by combining graphical representations, trend analyses, and textual insights.

Essentially, the information system serves as a central repository for data, handling, evaluating, and converting unprocessed data into useful insights via customized management reports. Strategic planning and operational efficiency are facilitated by these reports, which offer a comprehensive perspective of sales performance, inventory status, and market dynamics, empowering decision-makers throughout the business.

Example -

To create market forecast reports, Maliban's information system makes use of market trends, historical sales data, and predictive analytics. These papers provide information on prospective sales volumes, growing market segments, future market trends, and expansion prospects. For example, the system may predict that shifting consumer tastes or market trends will result in higher demand for a particular product category. These reports help Maliban's management make well-informed decisions about production planning, resource allocation, and market penetration strategies through graphical representations, trend analysis, and textual summaries.

Techniques for effective management reporting

- Use of Graphics

By providing visual representations of complex data, graphics are essential to management reporting. Charts, graphs, and infographics are examples of graphical features used in Maliban management reports that offer a quick and easy way to comprehend sales trends, inventory turnover rates, and market forecasts. For example, a graphical display of sales performance over quarters could facilitate management's ability to quickly identify trends or abnormalities. Visuals are effective tools for providing information briefly and helping decision-makers quickly understand important information.

- Use of Colors

By emphasizing significant data points or trends, the thoughtful application of color enhances the efficacy of management reports. Colors can be used in Maliban's reports to highlight important information. For example, red might be used to denote sales declines or green to represent growth. For example, in a sales report, sales statistics for different product categories could be represented by distinct hues, making it easier for management to identify changes in performance. The important regions that need attention or additional research are highlighted with the help of this visual difference.

- Use of Textual Information

In management reports, textual information adds context, justifications, or other details to graphical representations. In the context of Maliban, narrative summaries, annotations, or descriptions placed next to graphs or charts provide information on the ramifications or underlying causes of data trends. To help management make decisions, textual explanations might be included with a graphical representation of inventory turnover rates to show how certain product lines are affected by supply chain disruptions.

- Using the Drill-Down feature

This feature allows users to delve into the detailed data that lies beneath condensed reports. This feature in Maliban's management reports enables managers to explore deeper into particular areas or levels of data. For example, management could look at sales by region, product category, or even particular product performance by starting with an overall sales

report. With the more thorough perspective this feature offers, managers are better equipped to look into issues further and make data-driven choices.

Importance of Having Current , Valid ,Accurate Data and Information

- Informed Decision-Making

Managers and executives may make well-informed decisions when they have timely and accurate data at their disposal. Making strategic and tactical decisions that align with the current company environment is made possible by having up-to-date knowledge about client preferences, market trends, and internal operations.

example -

Maliban's executives are able to make well-informed decisions because to accurate sales data that is gathered from a variety of sources, including retail locations and internet platforms. For example, having up-to-date knowledge on consumer purchase trends enables them to plan promotional activities efficiently. In order to take advantage of this trend and match their tactics with the dynamics of the market, management may decide to devote additional resources to online marketing if data indicates a spike in online sales for a particular product line.

- Strategic Planning

Good strategic planning is supported by accurate data. It supports the process of defining reasonable objectives, seeing chances for expansion, and modifying plans of action in response to shifting market dynamics. Strategic planning may be inaccurate in the absence of trustworthy data, which could result in misdirected efforts and lost opportunities.

example -

Maliban can identify growth possibilities and set realistic targets with the use of accurate data. For instance, the corporation can plan the launch of healthier snack options because it has access to trustworthy data on market demand and production costs. This supports the company's growth plan by aligning with shifting customer tastes and offering a tactical advantage in tapping into a developing market niche.

- Operational Efficiency

The key to operational efficiency is having reliable data. Simplifying operations, cutting waste, and raising productivity are made possible by accurate information regarding inventory levels, production procedures, and resource allocation. It aids in workflow optimization and problem identification.

example -

A key component of operational efficiency is accurate data regarding inventory levels and production procedures. Accurate inventory data guarantees Maliban quick supply replenishment. Assume that reliable data points to rising demand for a specific product variation. If that's the case, the business can modify its production plans appropriately, which will lower the frequency of stockouts and improve operational efficiency.

- Compliance and Risk Management

Adherence to rules and guidelines is guaranteed by valid data. Precise data is necessary for risk evaluation and reduction. It assists in early risk identification and mitigation strategy implementation, protecting the company's interests.

example -

Valid data guarantees Maliban complies with industry rules and standards for compliance and risk management. Reliability and compliance with regulations are enhanced by the provision of precise financial data, for example. In addition, Maliban can prevent disruptions and protect its operations and reputation by employing data analysis to precisely evaluate possible supply chain risks.

- Customer satisfaction

It's critical for any business to comprehend the wants and demands of its customers. Precise information regarding consumer behavior and input facilitates customized goods, services, and advertising tactics, which raises client happiness and retention.

example -

Maliban can successfully accommodate customer preferences thanks to accurate customer data. For example, the company might improve consumer happiness and loyalty by introducing

new packaging for its products that matches with eco-friendly trends by studying customer input and purchase history.

- Credibility and Trust

Among stakeholders, such as clients, investors, and partners, trustworthy data fosters confidence. Strong connections and a good reputation in the industry depend on credibility, which is fostered by accurate reports and clear data.

example -

Among stakeholders, trustworthy data fosters trust. The trust of Maliban among investors and partners is bolstered by precise and lucid financial performance reporting. The organization establishes a solid reputation for dependability and honesty in the industry by continuously delivering correct reports and data.

Different models that can be applied to strategic information systems

Introduction to competitive Advantage

The term "competitive advantage" describes the special qualities or capabilities that allow a business to outperform rivals in its sector. It's what distinguishes a business and offers it a competitive advantage. This benefit may result from a number of things, including cutting-edge goods, first-rate customer support, cost leadership, a well-known brand, or exclusive technology. A business that has a competitive advantage over its rivals can increase profits, draw in more clients, and have a stronger position in the market.

Porter's five forces

Figure 5 : Port's five forces

Michael Porter developed Porter's Five Forces, which offer an organized framework for examining the competitive forces that exist within a sector. These five forces guide firms in understanding the dynamics of their sector by encompassing a variety of aspects that impact profitability and competition. The threat of new entrants looks at entry obstacles, like as

requirements for money or brand loyalty, which affect how simple it is for new rivals to enter the market.

The assessment of customers' and suppliers' bargaining strength determines how much sway these parties have over terms and pricing, which in turn shapes industrial relationships and profitability. The threat of substitutes assesses alternatives that could cause demand for the goods and services provided by a sector to shift. Last but not least, the degree of competitive rivalry measures how fiercely established businesses compete, which affects pricing policies and profitability. Businesses can strategically position themselves, make well-informed decisions to capitalize on strengths, reduce risks, and create plans that create and maintain a competitive edge within their industry, and strategize by thoroughly evaluating these dynamics.

An industry's competitive climate can be examined using Michael Porter's Five Forces methodology. It assesses the following five major factors that influence industry competition:

- Threat of New Entrants

The force known as the Threat of New Entrants evaluates the possibility of new rivals joining a market. Extensive capital requirements, stringent regulatory obstacles, or well-established brand loyalty are examples of high barriers to entry that can deter new competitors. For example, it is difficult for new companies to establish a foothold in the beverage market due to the high brand recognition and large distribution networks of existing brands like Coca-Cola and Pepsi. Elevated obstacles shield established businesses from fresh rivals and maintain their leadership in the industry.

- Bargaining Power of Buyers

Buyers' power to bargain for better terms and prices has a big impact on an industry. Customers with significant purchasing power can influence industry profitability by requesting greater quality, more services, or lower costs. For example, in the retail industry, major merchants such as Walmart or Amazon have significant purchasing power because of their big purchases. This gives them the ability to bargain with suppliers for lower pricing, which impacts the profit margins of manufacturers and distributors.

- Bargaining Power of Suppliers

This section assesses suppliers' impact on a certain sector. An industry can have a lot of bargaining leverage if its suppliers are few in number, have special resources, or have control over key components. For instance, in the auto business, automakers' production costs are influenced by the negotiating strength of steel suppliers. The profitability of automakers can be directly impacted by restricted steel supply or rising steel costs.

- Threat of Substitutes

This force takes into account the existence of substitute goods or services from other sectors of the economy that might meet a comparable need. An industry's capacity to set its own prices and achieve potential profitability is threatened by a high degree of replacement availability. For example, because they provide more affordable and personalized entertainment options, digital streaming services have become a threat to traditional cable television.

- Intensity of Competitive Rivalry

This metric assesses how fiercely established businesses in a certain industry compete with one another. High levels of competition can result in price wars, higher marketing costs, and worse profitability. For example, there is fierce competition among companies in the smartphone sector since several of them are often coming up with new ideas and using aggressive marketing tactics to take market share.

Porter's Five Forces: Maliban Analysis

- Danger of New Entrants

Given the incumbent rivals' strong brand loyalty and the substantial capital investment required to build manufacturing facilities, Maliban may encounter moderate barriers to entry. But there's a chance that the market for healthy snacks will draw new players, particularly if they have creative and nutritious product lines.

- Buyers' Bargaining Power

Within the health-conscious consumer sector, buyers' power ranges from moderate to strong. People are asking for healthier snack options more and more. Big box stores might put a lot of pressure on product quality and pricing, which would hurt businesses like Maliban's bottom line.

- Suppliers' Bargaining Power

Because certain resources are scarce, suppliers of natural or organic substances may have significant negotiating power. Maliban's expenses and supply chain effectiveness may be impacted by this.

- Danger of Substitutes

There are a number of healthy and wellness alternatives available on the market for snacks, including homemade snacks, fresh fruits, and nuts. These substitutes' accessibility may have an effect on Maliban's product prices and demand.

- Intensity of Competitive Rivalry

As more companies launch comparable items, competition in the healthier snack market is growing. The fierce competition in the market is fueled by both the desire for innovation and rivalry among established businesses.

Wiseman's Strategic planning process

Organizations can effectively negotiate the intricacies of strategic planning with the help of Wiseman's Strategic Planning Process, which provides a thorough roadmap. This systematic approach prioritizes flexibility and alignment with the ever-changing business landscape. The first step is to clearly define the organization's vision, which serves as a road map for its future. Internal appraisal evaluates the organization's strengths and weaknesses, whereas environmental scanning examines external elements for possibilities and dangers.

Long-term goals and objectives are developed using these insights to make sure they complement both internal resources and outside prospects. Implementation is carrying out plans while keeping an eye on developments to enable quick adjustments as necessary. This iterative process recognizes the necessity for adaptability and ongoing adjustments in response to shifts in the marketplace, technological advancements, or consumer trends. Through the integration of these stages, Wiseman's model cultivates a forward-thinking, responsive, and adaptable strategic planning process that enables firms to pursue their mission with resilience and agility while navigating unpredictable times.

the following provides more detail on each phase of Wiseman's Strategic Planning Process:

- Developing a Vision

Having a compelling and distinct vision for the organization's future acts as a compass. It entails painting a clear picture of the company's long-term objectives. For example, in Maliban's case, this stage might entail focusing on sustainability and natural components in their goods in order to become a leader in healthier snack choices. A clear vision unites the organization's activities and establishes the course for strategic planning.

- Environmental Scanning

This technique looks for opportunities and hazards by examining the outside world. At this point, Maliban is able to predict potential changes to its industry's market trends, consumer preferences, governmental changes, or technical breakthroughs. Maliban can proactively spot prospective dangers, like new laws influencing food labeling, or emerging possibilities, such changing consumer preferences for healthier snacks, by scanning the surroundings.

- Internal Appraisal

Determining the organization's internal capabilities and constraints is aided by evaluating its strengths and flaws. This entails assessing factors such as financial stability, distribution networks, brand recognition, and production efficiency for Maliban. By recognizing these internal elements, the business can strengthen its areas of strength and solve its shortcomings, which in turn influences its resource allocation and strategic choices.

- Long-Term Planning

It's crucial to establish long-term goals and objectives by analyzing internal and external elements. For example, Maliban could establish objectives to increase its product line, make investments in environmentally friendly packaging, or fortify its distribution networks based on the information obtained from environmental scanning and internal appraisal. These objectives are in line with the organization's strengths and the anticipated future.

- Implementing the Plan

This process entails converting strategic plans into concrete actions. It entails allocating resources, outlining roles, and coordinating the organizational structure to support the strategic objectives. This could be funding R&D for new products, educating staff members about sustainable methods, or forming alliances with suppliers who practice environmental responsibility, all on behalf of Maliban.

- Monitoring and Adapting

Success requires constant monitoring and adaptation. Maliban needs to monitor key performance indicators, evaluate the plan's effectiveness on a regular basis, and modify its tactics in reaction to environmental shifts. Because of its iterative nature, Maliban can be flexible enough to adapt as needed, take advantage of new opportunities, and successfully overcome obstacles.

Wiseman's Strategic Planning Process: Application to Maliban

- Developing a Vision

Maliban wants to lead the way in providing healthier snack options, with a focus on natural ingredients and sustainability in all of its goods.

- Environmental Scanning

Maliban examines customer preferences for sustainable products and the growing need for healthier snack options by analysing market trends.

- Internal Appraisal

While acknowledging shortcomings in its marketing to health-conscious consumers, the corporation evaluates its strengths in product innovation and its distribution network.

- Long-Term Planning

Maliban establishes objectives to enhance its marketing tactics to appeal to health-conscious consumers and broaden its product range with more natural and sustainable options in light of the analysis.

- Implementing a Plan

Maliban collaborates with suppliers who specialize in organic products and allots funds for research and development to produce healthier snack options.

- Monitoring and Adapting

In order to take advantage of new opportunities and counteract possible threats, the company constantly analyzes market trends, keeps an eye on sales data, and modifies its plans.

Processing Activities of Different Departments in Maliban Company

1. Production/Manufacturing

Responsibilities of the Production Department:

The production department at Maliban Company stands at the core of the manufacturing operations. Their responsibilities extend to overseeing the day-to-day manufacturing activities, ensuring that production schedules are met efficiently, maintaining stringent quality control measures, and upholding safety standards within the production facilities. They work closely with various teams, including Research and Development, Quality Assurance, and Supply Chain, to innovate processes, maintain product consistency, and meet the company's production objectives while adhering to regulatory requirements.

Production Functions

Within the production department, an array of functions contributes to the creation of Maliban's diverse snack products. These functions encompass recipe formulation, precise ingredient measurement and mixing, baking or processing procedures, packaging operations, conducting rigorous quality checks at each stage of production, and ensuring compliance with hygiene and safety regulations. Their meticulous oversight of these functions guarantees the consistent quality and taste of Maliban's products, aligning with consumer expectations.

- Creative Recipe Formulation: Consisting of ongoing research and development, creative recipe formulation is the focal point of the production function of Maliban. To develop distinctive and alluring recipes, the company makes significant investments in investigating cutting-edge flavors, textures, and ingredient combinations. They create products that not only adhere to the strictest quality requirements but also suit changing consumer preferences through rigorous testing and refinement. Maliban's dedication to innovation allows them to maintain a competitive edge in the market by providing unique snack options that appeal to a wide range of palates.

- Ingredient Sourcing and Handling: Strict oversight of ingredient sourcing and handling forms the foundation of Maliban's production function. The organization prioritizes

obtaining premium raw materials and establishes alliances with reliable vendors recognized for their steady quality. Strict quality control protocols are incorporated into the supply chain to guarantee that only premium ingredients are used in the manufacturing process. This painstaking process ensures that every product keeps the quality and flavor character that Maliban has always strived for.

- Accurate Mixing and Processing: Accurate mixing and processing are essential components of the production function. Maliban's modern production facilities are outfitted with cutting-edge gear and standardized procedures to guarantee accurate measurements and reliable mixing methods. By paying close attention to detail, every product batch is guaranteed to keep the precise ratios of ingredients, resulting in consistency in flavor, texture, and quality throughout the spectrum of offers.

  Strict Quality Control Procedures: Maliban's production function revolves around quality control. Dedicated teams of quality control personnel carry out thorough inspections at various points during the manufacturing process. These examinations include physical inspections, sensory assessments, and compliance with strict quality requirements. By ensuring that only goods that live up to the company's strict quality standards are made available to customers, these safeguards help to build brand loyalty and confidence.

- Respect for cleanliness and Safety Standards: It is crucial for Maliban's production function to uphold the highest standards of cleanliness and safety. Following industry best practices and food safety requirements is very important to the organization. In order to guarantee that the highest hygiene standards are maintained throughout the production process and protect the safety and integrity of their products, facilities are subject to routine audits and are outfitted with cutting-edge sanitation techniques.

- Commitment to Continuous Improvement: The production function of Maliban is distinguished by its commitment to ongoing improvement. To find opportunities for improvement, the organization regularly conducts evaluations, solicits feedback, and uses data-driven research. Because of their dedication to constant improvement, Maliban is able to quickly adjust to shifting consumer preferences and market demands, guaranteeing that they will always provide customers with high-quality snack products.

Diverse Product Range of Maliban Company

Figure 6 : Products of Maliban Company

Maliban Company prides itself on a rich and diverse product lineup catering to various consumer preferences. Their offerings span a wide spectrum of biscuits, cookies, wafers, and an assortment of snack variations. Each product undergoes a meticulous production process, carefully tailored to unique recipes, specialized ingredients, distinct baking methods, and customized packaging to resonate with different market segments, offering a comprehensive choice to consumers.

Managing Inputs

Efficient management of inputs is a cornerstone of the production department's responsibilities. This includes meticulous procurement of raw materials such as flour, sugar, flavorings, and other essential ingredients, along with ensuring a steady supply of packaging materials like wrappers and labels. Their robust inventory management systems, stringent quality checks on incoming materials, and proactive supply chain strategies ensure a consistent and uninterrupted flow of quality inputs for the production process.

- Effective Procurement Methods

Maliban's production division is committed to using effective procurement methods to obtain premium raw materials that are necessary for their wide range of products. They take part in strategic sourcing, forming alliances with reliable vendors who are renowned for their constant caliber. For example, the company chooses suppliers based on strict quality standards for obtaining wheat for their biscuits or sugar for their confectionary items, guaranteeing a dependable supply chain of premium components.

- Ensuring the Quality of Raw supplies

At Maliban, a key component of input management is conducting rigorous quality inspections on incoming supplies. When raw materials arrive, the production staff carefully examines and evaluates the quality. For example, sensory analyses are carried out when evaluating flavorings to make sure they satisfy predefined requirements for quality and taste. This meticulous attention to detail ensures that the production process uses only the best ingredients.

- Inventory Control Systems

Maliban keeps up-to-date, reliable inventory control systems that are customized to meet the unique requirements of their production processes. To ensure ideal supply levels, sophisticated software estimates demand, tracks inventory levels, and keeps an eye on consumption trends. This optimized strategy reduces waste, avoids stockouts, and promotes a seamless production flow, enabling the business to continuously fulfill customer demand.

- Proactive Supply Chain Strategies

To guarantee a steady stream of inputs, the production division uses proactive supply chain strategies. For instance, Maliban keeps extra inventory of essential raw materials or arranges backup suppliers in anticipation of demand swings or possible disruptions. By taking a proactive stance, unexpected events are less likely to disrupt the production process and ensure uniformity and continuity in the final product.

Managing Outputs

The production department ensures the transformation of raw materials into finished goods of impeccable quality. Their responsibilities include maintaining product consistency, adhering to production schedules, conducting rigorous quality checks at multiple stages, and overseeing efficient packaging operations. By meticulously managing the production process, they ensure that the finished products meet the company's high-quality standards and are ready for distribution to consumers, contributing to the company's reputation for excellence.

2. Research and Development (R&D)

Innovation and the creation of new products are fueled by research and development (R&D) departments. Researching the market, investigating technology developments, experimenting with novel ideas, developing, testing, and fine-tuning inventions are some of their processing tasks. They work together with different departments to improve current items or apply new ones in an effort to bring innovative ideas to market.

Responsibilities in Research Development

Product development and innovation are the main priorities of the R&D Department. Prototyping, testing new concepts, investigating new technologies, and performing market research are some of their duties. R&D works with other departments to develop novel solutions that are brought to market, keeping the business ahead of the curve in terms of technology and competitiveness.

3. Quality Assurance/Quality Control

Departments in charge of quality assurance and control make ensuring that goods adhere to established standards. They test products, perform inspections, enforce quality standards, put quality control systems in place, and analyze data to find and fix quality problems are some of their processing activities. They are essential to preserving the caliber of the product and reducing flaws.

Responsibilities

This department makes sure that goods fulfill specified criteria for quality. They carry out quality control procedures, carry out inspections, and guarantee that rules are followed. By reducing errors and guaranteeing that only goods that satisfy strict quality standards are delivered to customers, they uphold the company's stellar reputation.

4. Supply Chain and Logistics

This division oversees the movement of products and services. Procurement, inventory control, demand forecasting, transportation planning, warehouse management, and distribution coordination are among their processing tasks. In order to satisfy client expectations, they guarantee timely delivery, minimize expenses, and maximize supply chain efficiency.

Responsibilities

These two departments oversee the movement of products and services across the company. They are in charge of distribution, transportation, inventory control, and procurement. In order to satisfy client requests, they seek to maximize supply chain efficiency, cut expenses, and guarantee on-time delivery.

5. Sales and Marketing

The primary goals of the Sales and Marketing divisions are increasing revenue and client interaction. Lead generation, customer outreach, campaign design, content production, monitoring sales pipelines, market trend analysis, and competitor research are some of their processing tasks. They seek to strategically place goods and services in the market, nurture leads, and turn prospects into consumers.

Responsibilities

The department responsible for generating income and engaging with customers is Sales and Marketing. They carry out market research, maintain client relationships, produce leads, and develop marketing plans. In order to promote the company's goods and services, shape customer behavior, and keep a competitive advantage in the market, sales and marketing are essential.

6. Accounting and Finance

These divisions are in charge of handling financial issues. Processing of financial transactions, accounting, budgeting, financial statement preparation, audits, tax filings, and compliance reporting are all included in their processing activities. They preserve the company's financial stability and offer precise financial insights.

Responsibilities

The department in charge of handling financial issues inside the company is called Finance and Accounting. Financial transactions, budgeting, financial reporting, audits, tax compliance, and financial analysis are all part of their duties. They guarantee regulatory compliance, strategic planning, and financial stability.

7. Human Resources

The workforce is managed by human resources departments. Recruitment, onboarding, training, payroll processing, benefits administration, policy creation, dispute resolution, and guaranteeing adherence to labor regulations are all included in their processing tasks. They efficiently manage the company's human capital and cultivate a positive work culture.

Responsibilities

In charge of matters pertaining to employees and the workforce is Human Resources. They are in charge of hiring, training, administering benefits, putting policies into action, and making sure labor laws are followed. HR develops a happy workplace, handles talent, and ties employee growth to company objectives.

8. Information Technology

Data and technology are managed by information technology departments. IT infrastructure setup, data management, software development, technical assistance, cybersecurity, data analysis, and reporting are some of their processing tasks. They make sure that technology runs well and use data to inform decisions.

Responsibilities

Information Technology is responsible for overseeing data systems and technology infrastructure. Maintenance of IT infrastructure, data management, software development, cybersecurity, and technical support are among their duties. They guarantee data security and effective technology operations.

The Effectiveness of Information Systems

Information systems are essential to improving organizational effectiveness in a corporation at all levels. These solutions promote smoother processes, increase efficiency, and streamline daily chores at the operational level. At this level, transaction processing systems, for example, automate repetitive operations like payroll, inventory control, and order processing, minimizing human error and guaranteeing timely task completion.

At the managerial level, information systems offer crucial instruments for making decisions. Managers can gain insights into performance indicators, trends, and operational data by using reports and summaries generated by management information systems (MIS). This makes it possible to allocate resources based on current knowledge and make well-informed decisions and strategic plans.Executive support systems (ESS) and business intelligence technologies, which analyze complex data and offer predictive insights, are employed by executives at the strategic level. These tools support long-term planning, goal-setting inside the company, and matching company plans to current market conditions and new business prospects.

Information systems also promote collaboration at all levels by enabling departmental coordination, data exchange, and communication. For example, enterprise resource planning (ERP) systems facilitate smooth information flow and decision-making throughout the company by integrating many departments such as finance, HR, and supply chain.

In general, the efficacy of information systems is based on their capacity to deliver precise, timely, and pertinent data, supporting various organizational levels in decision-making, operational optimization, and maintaining competitiveness in a changing business landscape.

Components of Information Systems

- Data Collection

Information from a variety of sources is gathered for data collection. This step takes into account the data's cost, value, correctness, comprehensiveness, accuracy, flexibility, and reliability. To ensure a comprehensive and trustworthy dataset, organizations gather data from

a variety of sources, including consumer transactions, surveys, social media, sensors, and other technologies.

- Data processing

After the information is gathered, it is processed to turn it into useful knowledge. To do this, the data must be sorted, cleaned, and structured into a manner that makes sense. Sorting, aggregating, analyzing, and applying algorithms are some of the data processing processes that help transform raw data into reports, trends, or insights that can help with decision-making.

- Information Storage

Following processing, the important information extracted from the data needs to be stored. Databases, data warehouses, and cloud storage platforms are places where information is kept. In order to guarantee information accessibility, security, and preservation for later use, effective storage is essential. This information is kept on file until it is needed, at which point it becomes an important organizational asset.

- Data Updating and Maintenance

Data is continuously updated and maintained by information systems. This entails updating current data to reflect changes, removing unnecessary or redundant information, and adding new information. Frequent updates guarantee that data stays accurate, pertinent, and in line with the organization's changing demands. This upkeep guarantees that the records of data and information are accurate and up to date.

Effectiveness of information systems at the operational, tactical and strategic levels within an organisation.

Department	Operational Level (TPS)	Tactical Level (MIS)	Strategic Level (DSS/ESS)
Sales and Marketing	Order Processing, Inventory Handling	Sales Management, Inventory Control	Sales Region Analysis, Short-term Forecasting, Price Calculation, Long-term Sales Forecasting
Manufacturing	Material Movement Control, Production Scheduling	Production Scheduling, Vacancy Analysis	New Production Line Introduction, New Raw Material Selection, Technological Advancements Planning
Finance and Accounting	Payroll, Accounts Payable, Financial Reporting	Short-term Forecasting, Budgeting, Profitability Analysis	Cash Flow Forecasting, Long-term Operating Plans, Financial Policy Formation
Human Resources	Employee Recordkeeping, Training Sessions, Relocation Cost Control	Recruiting, Contract Cost Analysis, Personnel Planning	Technology Development, Entry into New Markets, New Raw Material Selection

Table 17 : Effectiveness of information systems at the operational, tactical and strategic levels within an organisation.

The constrains that the Maliban faces when gathering data and information

- Faulty Data Collection Instruments

Maliban relies on various instruments and sensors throughout its production process to gather critical data. However, malfunctions or inaccuracies in these instruments could result in flawed data. For example, if the temperature sensors in their ovens malfunction, it might lead to inaccurate data regarding the baking process, impacting the quality and consistency of their products.

- Data Entry Errors and Technology Limitations

Inaccuracies in data entry, especially during manual input, pose a significant challenge. Human errors can result in inconsistencies within the data records, affecting inventory counts, production quantities, or order processing. Moreover, if Maliban's technology infrastructure lacks real-time data capabilities or faces limitations due to outdated systems, it could hinder the efficiency and accuracy of data collection and processing.

- Filtering Relevant Data and Reliability of Sources

With an abundance of data generated across multiple sources, sifting through and isolating pertinent information becomes challenging. Maliban needs to discern meaningful data from the noise, especially in customer feedback or market trends derived from various online platforms. Additionally, relying on external sources for market reports or supplier information might pose reliability issues. For instance, outdated market forecasts could misguide strategic decisions, impacting product development or market positioning.

- Integration Challenges

Integration problems arise when different departments within Maliban use separate systems that don't effectively communicate with each other. For instance, if sales data from the CRM system doesn't seamlessly integrate with the production department's inventory management software, it creates difficulties in obtaining a holistic view of the business operations.

Types of Data

Numeric Data

Organizations collect numeric data in various forms, including discrete (whole numbers) and continuous (real numbers). This data often involves counts, measurements, or quantitative information. For instance, retail companies collect discrete data regarding the number of products sold in a day, while scientific research organizations gather continuous data like temperature variations. Numeric data is crucial for statistical analysis, trend identification, and making quantitative decisions within an organization.

Categorical Data

This type of data involves the classification of information into distinct categories or groups. Nominal data categorizes items without any specific order, such as customer IDs or product categories. Ordinal data, on the other hand, assigns a specific order or rank to categories, like satisfaction ratings (e.g., poor, average, excellent). Organizations use categorical data to segment markets, classify information, and derive patterns or relationships between different groups.

Text Data

Organizations accumulate text data from various sources such as emails, reports, social media, and customer feedback. This unstructured data type presents challenges in analysis but offers valuable insights into sentiments, opinions, and qualitative information. Text data analysis, through natural language processing (NLP) techniques, helps organizations understand customer sentiments, trends, and emerging topics in the market.

Time-Series Data

Collected with timestamps or chronological order, time-series data captures information over specific intervals. It's fundamental for analyzing trends, patterns, and seasonal variations. For instance, financial institutions use time-series data to analyze stock market movements, while utility companies track energy consumption patterns over time.

Spatial Data

Geographic or spatial data involves information tied to specific locations or geographical coordinates. Organizations, especially in logistics, urban planning, or environmental research, gather spatial data to map territories, analyze demographics, plan routes, or assess environmental changes.

Binary Data

This type of data consists of binary digits (0s and 1s) and is prevalent in computer systems and digital communication. Organizations use binary data in programming, data storage, encryption, and processing digital information.

Qualitative Data

Gathered through observations, interviews, or open-ended survey questions, qualitative data provides descriptive insights into opinions, behaviors, or experiences. Organizations use qualitative data to understand customer preferences, employee feedback, or market perceptions.

Challenges in Data Collecting

Quality of Data: Ensuring the completeness, correctness, and dependability of the data gathered is an ongoing problem. Incomplete or inaccurate data might result in faulty analyses and poor decision-making.

Data Security and Privacy: Organizations must collect data while upholding strict security protocols and adhering to data protection laws, given the growing worries about data breaches and privacy abuses.

Volume and Variety: Gathering, storing, and processing large volumes of data effectively is difficult due to the sheer volume of data generated today and its variety of types (structured, unstructured, and semi-structured).

Data Silos and Integration: Information is difficult to combine and integrate for thorough analysis and decision-making when it is scattered across several departments or systems, resulting in data silos.

Bias and Quality Control: Inadvertent biases in automated data gathering procedures or techniques might distort the dataset, compromising the dependability and accuracy of analysis.

Ethical Difficulties: Consent, openness, and fair use of data are some of the ethical issues that arise while gathering data responsibly, particularly in delicate areas like user behavior tracking or artificial intelligence applications.

Data Governance and Management: It is difficult but necessary for maintaining data integrity and compliance to set up explicit policies, processes, and governance frameworks to oversee and control data collection activities throughout the company.

Technological Restrictions: An organization's capacity to effectively gather, store, and handle massive amounts of data may be hampered by outdated technologies or a lackluster technological infrastructure.

Technological Limits: An organization's capacity to effectively gather, store, and handle massive amounts of data may be hampered by outdated technologies or a lackluster technological infrastructure.

Changing Regulatory Environment: Organizations must constantly modify their data gathering methods to comply with new data protection laws and compliance standards, which can be difficult to keep up with.

Human Error and Training: Entering or processing data incorrectly by hand is a frequent problem. Sufficient instruction and training are required to reduce mistakes and guarantee precise data gathering.

Recommendations

- Quality Assurance Procedures: To guarantee correctness, completeness, and dependability throughout data gathering, apply strict quality checks and validation procedures. To keep data high-quality, audit and validate it on a regular basis.

- Data Security Measures: To protect gathered data, give data security top priority by putting encryption, access limits, and frequent security audits into place. Respect data protection laws to preserve user privacy.

- Advanced Data Collection Tools: Make an investment in cutting-edge technologies and tools that make data processing, storage, and collection more precise and efficient. When feasible, use automation to cut down on human mistake.

- Interoperability and Integration: Put in place solutions that facilitate easy data sharing and integration between various departments or systems. This guarantees a more comprehensive picture of organizational data and minimizes data silos.

- Data Governance Framework: Clearly define the rules, regulations, and procedures that control how data is collected. Establish roles, duties, and protocols for handling and utilizing the data that has been gathered.

- Ethical Data Collection Practices: Make sure that data collection takes ethics, fairness, and transparency into account. When required, get express consent; otherwise, give user privacy and data anonymity a priority.

- Modern, scalable technology infrastructure that can effectively manage massive amounts of data should be purchased. For greater flexibility and scalability, think about cloud-based solutions.

- Cooperation and Cross-Functional Teams: To ensure that data gathering activities are in line with corporate objectives, cultivate cooperation amongst IT, data analysts, and

business divisions. Cross-functional teams are able to take a comprehensive approach to problems.

- Regular Assessment and Improvement: Keep an eye on the technologies and procedures used in data collection. To find opportunities for innovation and development, get input from users and stakeholders.

Identify the Completive strategy for the Maliban Company

Cost Leadership:

Maliban Company could pursue a cost leadership strategy by focusing on operational efficiencies, streamlining production processes, and optimizing supply chain management. By reducing production costs without compromising quality, they can offer competitive pricing to customers, gaining a cost advantage in the market. For instance, implementing lean manufacturing techniques or negotiating favorable supplier contracts could help minimize costs.

Differentiation:

Choosing a differentiation strategy, Maliban can emphasize unique product features, quality, and branding. They could innovate by introducing new flavors, healthier alternatives, or environmentally sustainable packaging. By standing out in the market with distinct offerings, they can attract customers seeking specialized or premium products, allowing them to command higher prices and build customer loyalty.

Innovation:

Innovation is crucial for Maliban to maintain a competitive edge. Investing in research and development to create innovative products or manufacturing processes can set them apart from competitors. For instance, introducing advanced technology in production or exploring new ingredients aligned with changing consumer preferences could fuel innovation.

Growth:

Pursuing a growth strategy, Maliban could expand its market presence domestically or internationally. Exploring new geographical markets or diversifying product lines could stimulate revenue growth. Additionally, strategic acquisitions or partnerships with complementary businesses could facilitate entry into new markets or market segments.

Alliance:

Forming strategic alliances or partnerships with distributors, retailers, or suppliers can enhance Maliban's market reach and capabilities. Collaborating with partners who offer synergies in distribution networks, technology, or market insights could enable Maliban to

leverage shared resources and expertise, facilitating growth and competitiveness. more details in paragraphs

The way Maliban can achieve competitiveness in Global Market through those strategies

Cost Leadership:

Maliban Company aims to secure a competitive advantage through cost leadership. By concentrating on operational efficiencies, Maliban will streamline production processes, optimize resource utilization, and employ lean manufacturing principles. Embracing these methods enhances productivity while reducing wastage and operational costs. Furthermore, the company will negotiate advantageous contracts with suppliers to secure raw materials at competitive prices. This meticulous cost management strategy ensures that Maliban can offer its products at compelling prices without compromising quality, enabling them to capture a larger market share.

Differentiation:

With a focus on differentiation, Maliban strives to stand out in the competitive global market. The company is committed to innovation by introducing new and unique product features, emphasizing high-quality ingredients, and adopting environmentally sustainable packaging. These initiatives align with evolving consumer preferences, attracting customers seeking specialty or premium products. By investing in R&D to create distinctive flavors or healthier alternatives, Maliban aims to forge a lasting connection with consumers, enabling them to command premium prices and foster strong brand loyalty.

Innovation:

Innovation remains a cornerstone of Maliban's strategy for global competitiveness. Through substantial investments in research and development, Maliban endeavors to pioneer innovative products and manufacturing processes. This includes integrating cutting-edge technology into production lines and exploring novel ingredients aligned with shifting consumer trends. By continuously pushing boundaries and offering unique and inventive solutions, Maliban intends to secure a distinct position in the market, setting itself apart from competitors.
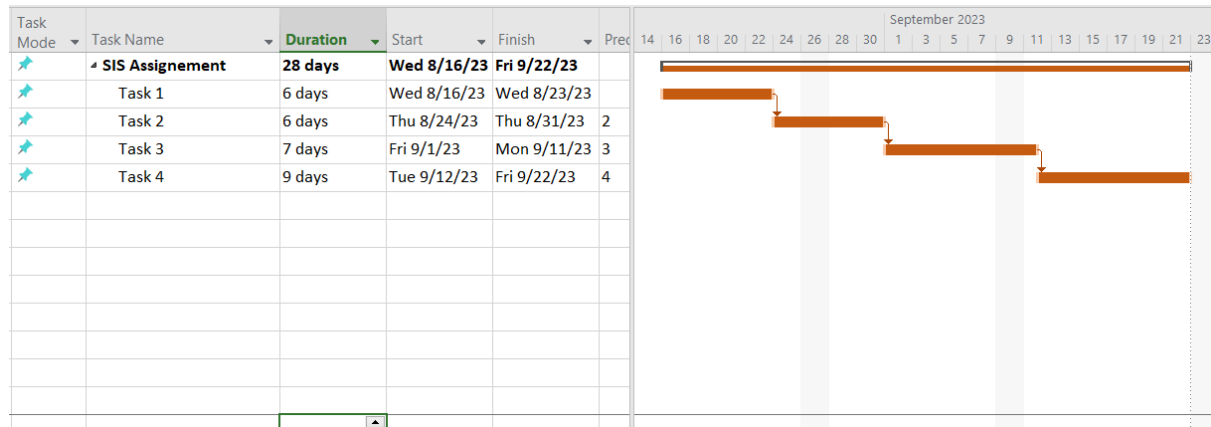
Growth:

Maliban Company pursues growth as a key strategy for global expansion. The company plans to venture into new geographical markets both domestically and internationally. This growth strategy entails diversifying its product lines to resonate with diverse consumer preferences worldwide. Additionally, strategic acquisitions and partnerships with synergistic businesses enable Maliban to access new markets and market segments efficiently. By embracing these growth initiatives, Maliban aims to bolster its market presence and enhance revenue streams.

Alliance:

Strategic alliances and partnerships play a pivotal role in Maliban's pursuit of global competitiveness. Collaborating with distributors, retailers, and suppliers offers Maliban an extended market reach and augments its capabilities. These alliances harness the strengths of partners in distribution networks, technological advancements, and market insights, propelling Maliban's growth trajectory. Leveraging shared resources and expertise through strategic partnerships enables Maliban to expand its footprint in the global market while delivering enhanced value to consumers.

Gantt chart for the Assignment

Task Mode	Task Name	Duration	Start	Finish	Pred
📌	◢ SIS Assignement	28 days	Wed 8/16/23	Fri 9/22/23	
📌	Task 1	6 days	Wed 8/16/23	Wed 8/23/23	2
📌	Task 2	6 days	Thu 8/24/23	Thu 8/31/23	2
📌	Task 3	7 days	Fri 9/1/23	Mon 9/11/23	3
📌	Task 4	9 days	Tue 9/12/23	Fri 9/22/23	4

References

- (n.d.). Retrieved from https://www.britannica.com/topic/information-system

- *Emeritus*. (n.d.). Retrieved from https://emeritus.org/in/learn/information-system/

- *Maliban Company*. (n.d.). Retrieved from https://www.malibangroup.com/

- *Tech target*. (n.d.). Retrieved from https://www.techtarget.com/whatis/definition/IS-information-system-or-information-services

- Martin (2016). Global Marketing: Strategies, Definition, Issues, Examples | Cleverism. [online] Cleverism. Available at: https://www.cleverism.com/global-marketing-strategies/ [Accessed on 2nd November 2023].

- Martin. (2017), Management Information Systems (MIS): Definition and How It Works, [Online] Available from: https://www.cleverism.com/management-information-systems- mis/ [Accessed on 2nd November 2023]

- Ozioko, C. (2019). Roles and Responsibilities of a Finance Department in a Pharmaceutical

- Industry,   [Online]   Available   from:

- https://www.pharmapproach.com/roles-responsibilities-finance-department-pharmaceutical-industry/ [Accessed on 2nd November 2023]

- Porter's Five Forces of Competitive Position Analysis 2013, [Online] Available from: https://www.cgma.org/resources/tools/essential-tools/porters-five-forces.html [Accessed on 4th November 2023]

- Porter's Five Forces; Understanding Competitive Forces to Maximize Profitability,

- [Online] Available   from https://www.mindtools.com/pages/article/newTMC_08.htm

- [Accessed on 5th November 2023]

- Pricing   Management,   [Online]   Available   from:
  https://www.pricingsolutions.com/pricing-management/ [Accessed on 19th May
  2023]

- Regulatory compliance (2018),   [Online]   Available

- from:https://searchcompliance.techtarget.com/definition/regulatory-compliance

- [Accessed on 7th November 2023]

- Robinson, A. The 5 Key Reasons Why Data Quality Is So Important, [Online] Available
  from: https://cerasis.com/data-quality/ [Accessed on 9th November 2023]

- Sur, S. (2013), Decision Support System (DSS), [Online] Available from:
  https://www.slideshare.net/sursayantan92/decision-support-systemdss [Accessed on 9th

- November 2023]

Grading Criteria	Achieved	Feedback
LO1: Analyse the information requirements of organisations.		
P1 Discuss the information needs and requirements for the functional departments of an organisation.		
P2 Produce an input/output (I/O) diagram to represent the data and information requirements of a functional department.		
M1 Compare and contrast different processing activities that occur within functional departments within an organisation.		
D1 Evaluate the inputs, outputs and processing activities of a selected organisation.		
LO2: Discuss the types of information systems that are used within all levels of an organisation.		
P3 Describe the function of different information systems.		

P4 Discuss the information needs required at differing levels within an organisation.		
M2 Analyse the effectiveness of information systems at the operational, tactical and strategic levels within an organisation.		
D2 Differentiate between the function and purpose of information systems at different levels within an organisation.		
LO3: Demonstrate the use of an information system to produce management information		
P5 Demonstrate the use of an information system for management reporting purposes.		
P6 Discuss the importance of an organisation having data and information that is current, valid and accurate.		
M3 Analyse the constraints that an organisation can face when gathering data and information.		
D3 Critique with examples, how a given organisation can use information for effective decision-making and forecasting.		

LO4: Evaluate the effectiveness of strategic information systems		
P7 Identify different models that can be applied to strategic information systems.		
M4 Justify the ways in which an organisation can obtain competitive advantage within a global market.		
D4 Evaluate how strategic information systems can contribute to the competitiveness of organisations.		