Private & Confidential

# BERJAYA BUSINESS SCHOOL

## FINAL EXAMINATION

| | | |
|---|---|---|
| Student ID (in Figures) | : | |
| Student ID (in Words) | : | |

| | | |
|---|---|---|
| Course Code & Name | : | **MGT5143 Supply Chain Management Dynamics (MSc)** |
| Trimester & Year | : | September – December 2019 |
| Lecturer/Examiner | : | Dr. Lai Ving Kam, Associate Professor |
| Duration | : | 3 Hours |

**INSTRUCTIONS TO CANDIDATES**

1. **This question paper consists of 2 parts:**
   **PART A (40 marks) : Case study questions. Answer all THREE (3) case study questions.**
   **PART B (60 marks) : Answer only FOUR (4) essay questions out of NINE (9) questions given. Answers are to be written in the Answer Booklet provided.**
2. **Candidates are not allowed to bring any unauthorized materials except writing equipment into the Examination Hall. Electronic dictionaries are strictly prohibited.**
3. **This question paper must be submitted along with all used and/or unused rough papers and/or graph paper (if any). Candidates are NOT allowed to take any examination materials out of the examination hall.**
4. **Only ballpoint pens are allowed to be used in answering the questions, with the exception of multiple choice questions, where 2B pencils are to be used..**

**WARNING:** **The University Examination Board (UEB) of BERJAYA University College regards cheating as a most serious offence and will not hesitate to mete out the appropriate punitive actions according to the severity of the offence committed, and in accordance with the clauses stipulated in the Students' Handbook, up to and including expulsion from BERJAYA University College.**

**Total Number of pages = 11 (Including the cover page)**

**PART A : Case Study Questions**
**INSTRUCTION(S) : Answer ALL THREE (3) questions on the answer sheet provided.**

Case study for Part A. of MGT5143 Supply chain management dynamics

**Malaysian Supply Chain Management in Action**

Author: Dr Lai Ving Kam Associate Professor – Logistics and Supply Chain Management,
Berjaya University College.

Malaysia has delinked from global supply chain since early 2000 (Fig.01 Lai Ving Kam 2011). After more than 50 years of industrialization since mid-1960s, majority of Malaysian domestic manufacturing firms have relinquished from global finished product manufacturing centre to the components supplies and supporting function roles. There have been limited upstream and downstream migration of the domestic industry abide that Malaysia was the centre of Electronics and Electrical product manufacturing centre of the worlds in 1980- 2000. The government efforts in nurturing new high-tech industries have not delivered any palpable results. For four decades, from mid 1960s -2000s Malaysia has received significant foreign direct investment (FDI) inflow. Multi-national corporations (MNCs) had treated Malaysia as a largely low-cost off shore manufacturing base. The consequence is an erosion of manufacturing capability as witnessed today. Malaysian administration also failed to understand the negative impacts of lacklustre supply chain management and underestimating the complexity. It has too many untested assumptions, ignoring variation and diversity. We are over-reliance on 'command' models of leadership with inadequate amounts and kinds of communication to spur new direction.

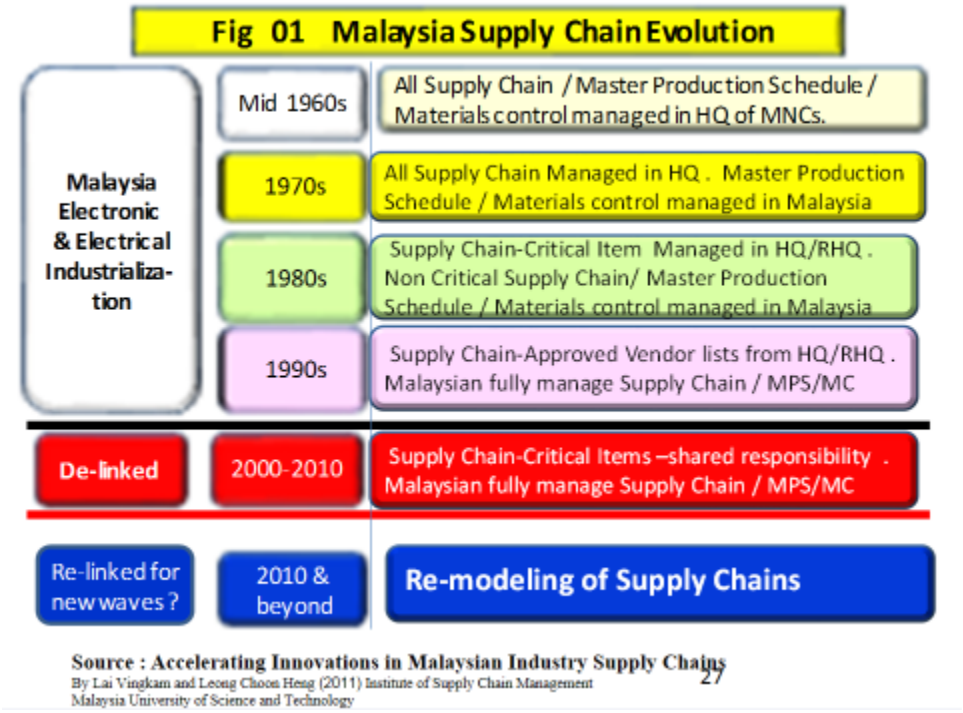
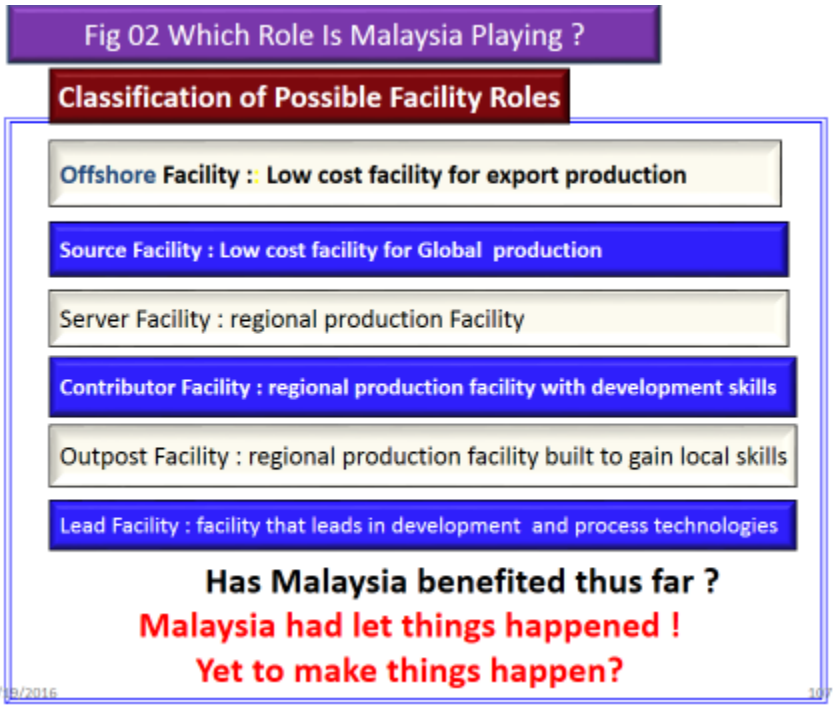


Fig 02 illustrates that throughout the years that the MNCs were strongly residing in Malaysia, there are adaptable roles that the country had played but the transfer of technology was limited.

Today, Malaysia has relinquished to become part of the integrated supply chain support China and the rest of the world with intermediate electronics goods (IEGs) and not the finished goods we used to produce for the global market. In the past, Malaysia has spent billions of Ringgit yet failed to nurture a Malaysia technological capability. Thus the consequences are sunk investment in the wrong tool – a tool that doesn't work well, doesn't fulfil real needs. It actually made things worse, damaged credibility and subtracts public value. Malaysia manufacturing industry and economy have not benefiting as much as the manufacturers who source from our country. The domestic supply chains are seen to be disorganized and uncoordinated, suffering from a lack of domestic investment. Supply chains are largely the results of foreign direct investment (FDI) which has little incentive to support the development of potential domestic competitors.




In mid-2019, two major global manufacturers of computer storage products announced their departure from Malaysia by end of the year 2019 has further eroded the Malaysian initiative to recapture the position of substantiate manufacture centre of the world. Furthermore, Malaysia is still trapped in the old mind set in addressing the current issues. Are we still unconsciously following the old path of contract or outsourcing services dutifully compete in screwdriver outsourcing mode? Are there any significant domestics firms taken the challenge to develop the centre of excellence to rebuild the once manufacturing centre of all thing electronics and electrical in the late 1990 and early 2000? Malaysia has also been propagating the Malaysian Brand without much positive impact. Are we ready now to springboard and rejuvenate the supply chain industry? Where are our skilled and unskilled workers? What are we doing about them without the low cost advantage? Can we compete in the not level playing field? The China

manufacturing 2025 and super connectivity created by China road and belt initiative have made Malaysia looks misplaying the industry revitalization efforts?
Delink from global supply chain, Malaysia has also disjointed from development of technology and innovation. This has further pressurize the topography of logistics and supply chain management. Malaysia lost the position of manufacturing centre of the world in early 2000. Migration of Industries mainly are not due to labour and manufacturing costs but labour shortage started in mid 1990s due to tight labour mobility. We are still facing the similar situation today. Are there any supply chains in Malaysia that can support the nurturing of Malaysian firms in existing digitized market? Are there continuous business process improvements especially in the outsourcing business functions beyond manufacturing operations? How to harness the existing infrastructure to springboard into provide full service from product conception-definition till drop ship to customers globally? Are we ready to take centre stage in global supply Chain hub? By building and deepening their technological capabilities, small medium scale suppliers can exploit opportunities for different types of upgrading.

**The needs to revitalize Malaysian Supply Chain Management**

The following trends have narrowed the window of opportunities for medium scale contract manufacturing nations such as Malaysia:-

1. Management of Technology and product lifecycle: the proliferation of less expensive "open-standard" technologies which enable quicker-to-market product launching;
2. Demand is usually not well behaved: uncertainty in demand causing differentiation-led commoditization and rapid price fall
3. Aligning Capacity with Lifecycle and excess capacities; and the outsourcing of full ODM ( Original Design Manufacturing) product to Chinese and ODM service providers such as Flextronics, Foxtron and others have created more oligopoly industry structures.
4. The contract giving parties have relinquished the control on product design and manufacturing functions and only focus on product marketing and distribution.

They are several additional Keys Questions:

1. What are the innovations currently undertaken by Malaysian companies that have enabled them to stay competitive in the domestic and global markets?
2. Why other companies have not been able to innovate?
3. What kinds of supply chain networks are needed for an adaptive responsive supply chain?
4. What kinds of innovations take place in supply chains?
5. What forms of government interventions are needed to enhance innovations in supply chains affecting Malaysian companies?

To support the drive for innovative and adaptive supply chain, the collaborative innovation environment variable has to incorporate three elements:

(1) The government supports environment for selective or preferred indigenous innovation that encourage open standard adoption and collaboration ;
(2) The existence of an open organizational setting that reduces conflict while improving communication and connections across organizational boundaries
(3) Encourages the development of cross-functional / inter-firm and even inter-sector innovation teams.

Malaysia does not have the extended supply chain locally and need to depend on global supply – one of the reasons most cost sensitive MNCs taken the flight out. Malaysia needs to re-nurture new supply chain management.

**Developed by Dr. Lai Ving Kam** **Oct 2019**

**PART A : CASE STUDY QUESTIONS (40 MARKS)**
**INSTRUCTION(S) : Answer ALL three (3) case study questions. Answers are to be written in the Answer Booklet provided.**

---

**Case Questions**

Question 1

Assess the supply chain management core competencies in Malaysian by proposing **FIVE (5)** critical points in any major industrial sector to rejuvenate the adaptive supply chain management.
(12 Marks)

Question 2

Contingency theory and theory of constrains advocate that there is no single ideal supply chain management strategy in any given business situation. Looking at the current stage of supply chain management dynamics, justify in **SIX (6)** criteria on how a Malaysian fast changing industry sector will excel in a very volatile market.
(12 Marks)

Question 3

In order to regain the past glory of the global manufacturing centre of all things electronic and electrical, assess the **SIX (6)** policies that the Malaysian federal administration must incentivize the private sector to rebuild the supply chain management dynamic in an industrial sector that could reposition Malaysia in the competitive market.
(16 Marks)

**END OF PART A**

**PART B** : **ESSAY QUESTIONS (60 MARKS)**
**INSTRUCTION(S)** : **Answer only FOUR (4) essay questions out of Nine (9) questions given. Answers are to be written in the Answer Booklet provided.**

---

Question 1

Supply chain management (SCM) requires a common understanding of supply chain objectives and individual roles, an ability to work together, and a willingness to adapt in order to create and deliver the best products and services possible.

a. SCM is much larger in scope than business, very complex and constantly changing by the minutes. Appraise the **THREE (3)** macro processes in an industry sector that you familiar.

(6 Marks)

b. Visibility, technology and flexibility are basic ingredients that need to be incorporated seamlessly in order for a supply chain to function efficiently regardless of the length of the chain. Assess **FOUR (4)** parameters in supply chain optimization

(5 Marks)

c. There are several levels of supply chain integration with close alignment and coordination Construct **FOUR (4)** anticipated benefits of the integrated supply chain solution.

(4 Marks)
(Total 15 Marks)

Question 2

Short falls in Supply Chain Management theory may be due to slow transformation towards demand-driven Supply Chain and the applications of technology, information sharing and contemporary supply chain initiatives.

a. Compose **FOUR (4)** theoretical gaps for Supply Chain Management in practices in any industry sector in Malaysia.

(8 Marks)

b. Poor supply chain management performances may due to insufficient articulated theory concerning the relationship between lead time reduction and demand information transfer in supply chain.
Evaluate **FOUR (4)** supply chain management improvement options in enhancing the overall supply chain performance.

(7 Marks)
(Total 15 Marks)

Question 3

Supply chain coordination requires each stage of the supply chain to share information and take into account the impact its actions on other stages. Coordination improves if all stages of the chain take actions that are aligned which increase total supply chain surplus.

**a.** Lack of coordination is due to the objectives of different stages are conflicting or information moving between stages is distorted.
Examine **FOUR (4)** causes of Bullwhip effects in Smart phone industry in Malaysia.

(8 Marks)

**b.** Illustrate the **FOUR (4)** counteraction of Bullwhip effect

(7 Marks)
(15 Marks)

Question 4

Managing the customer and supply chain uncertainty require management to decide on supply chain capabilities to meet the strategic fit in supply chain responsiveness and efficiency concurrently.

a. Given a competitive strategy, what should a company's supply chain do particularly well by examine **FIVE (5)** key decisions in capacity planning in managing economies of scale and aggregate planning in the Supply Chain?

(8 Marks)

b. Illustrate **SIX (6)** importance of capacity decisions minimum efficient scale – the point at which the increase in the scale of production yields no significant unit cost benefits

(7 Marks)
(Total 15 Marks)

Question 5

Inventory management is the supervision of non-capitalized assets (inventory) and stock items. A component of supply chain management, inventory management supervises the flow of goods from manufacturers to warehouses and from these facilities to point of sale.

a. Illustrate **FIVE (5)** ways on how companies use their inventory.

(5 Marks)

b. Describe **FIVE (5)** basic objectives of Inventory Management in service industry.

(5 Marks)

c. How a company manages its inventory plays a critical role in determining costs, profitability and customer service. As a general rule, all businesses try to minimize inventory reduces the amount of money tied up in stock and reduces spoilage and obsolescence, as well as storage costs. Identify **FIVE (5)** common Inventory Management Philosophies in adaptive supply chain management

(5 Marks)
(Total 15 Marks)

Question 6

Aggregate Planning in practice is about think beyond the enterprise to the entire supply chain, making plans flexible because forecasts are always wrong, rerun the aggregate plan as new information emerges and use aggregate planning as capacity utilization increases.

a. Appraise the practical considerations of Aggregate planning by identify **THREE (3)** potential benefits and **THREE (3)** potential shortfalls.

(6 Marks)

b. Reference to the table below , compute the demand per day by month and half a year
(3 Marks)

| Month | Expected Demand | Production Days | Demand per Day (computed) |
|---|---|---|---|
| Jan | 900 | 22 | |
| Feb | 700 | 18 | |
| Mar | 800 | 21 | |
| Apr | 1200 | 21 | |
| May | 1500 | 22 | |
| Jun | 1100 | 20 | |
| | 6200 | 124 | |

c. Identify the **FOUR (4)** Aggregate Planning function in supply chain management.

(6 Marks)
(Total 15 Marks)

**Question 7**

In a business scenario "strategic fit means aligning supply chain strategy with competitive strategy." Companies build a competitive strategy to target a set of customer segments and build strategies to satisfy needs and priorities of those customer segments.

a. Outline **FIVE (5)** major obstacles to achieving strategic fit in fast changing product sector in Malaysia.

(5 Marks)

b. Assess **FIVE (5)** benefits gained from optimal level of Product Availability in uncertainty market environment.

(5 Marks)

c. Illustrate **FIVE (5)** measurements of Product Availability in fast moving product sector.

(5 Marks)
(Total 15 Marks)

Question 8

Information is the driver that serves as the “glue” to create a coordinated supply chain and effective use of IT in the supply chain can have a significant impact on supply chain performance.

a. Illustrate **FIVE (5) engagements of** Supply Chain Information Technology in practice.

(5 Marks)

b. Assess **FOUR (4)** information technology challenges.

(5 Marks)

c. Describe **THREE (3)** future of IT in the Supply Chain Management.

(5 Marks)
(Total 15 Marks)

Question 9

Revenue management is the application of disciplined analytics that predict consumer behaviour at the micro-market levels and optimize product availability and price to maximize revenue growth in a given supply chain management.

a. In an adaptive responsive supply chain, describes **FOUR (4)** conditions under which Revenue Management has the greatest effect.

(5 Marks)

b. Illustrate **FOUR (4)** Revenue Management challenges for Bulk and Spot Customers

(5 Marks)

c. Assess **FIVE challenges** in using Revenue Management in practice

(5 Marks)

(Total 20 Marks)

End of Examination paper