

# QSO 330 Final Project Guidelines and Rubric

### **Overview**

The final project for this course is the creation of a supply chain evaluation. Supply chain management (SCM) is a holistic view of a company's efforts to source, procure, receive, store, and deliver products. These products can be raw materials for a manufacturing process, consumer goods for a retail chain, or a collection of items that will be joined in some way before ultimate delivery to the customer. In today's global economic environment, SCM takes on an increasing level of complexity as companies attempt to reduce costs, drive efficiency, and remain compliant with the corporate social responsibilities that today's consumers demand.

For this project, you will act as the lead consultant to Walmart as it attempts to improve its overall supply chain. The ultimate recommendation you make will be based upon your analysis of the current SCM and your insight on how to improve demand forecasting, sourcing, transportation, and warehousing options to optimize the overall operation. This project will showcase your ability to balance the competing requirements of reducing cost and increasing efficiency while remaining at the forefront of sustainable operations for the industry. Your analysis and recommendations will be formatted into a supply chain evaluation for Walmart's executive team to use to optimize their supply chain management in this very demanding environment.

The project is divided into **two milestones**, which will be submitted at various points throughout the course to scaffold learning and ensure quality final submissions. These milestones will be submitted in **Modules Three and Five.** The final product will be submitted in **Module Seven.** 

In this assignment, you will demonstrate your mastery of the following course outcomes:

- Analyze operational and logistical issues related to supply chain management using appropriate quantitative and qualitative methodologies
- Determine pertinent issues and potential constraints for problem solving regarding supply chain management
- Develop distribution solutions based on supply chain management principles that address network inefficiencies
- Recommend appropriate cost-saving strategies and risk mitigation plans for supply chain implementation

## **Prompt**

Using the provided Walmart China case study, create a supply chain evaluation in which you assess Walmart in terms of its demand forecasting, sourcing, transportation, and warehousing processes in order to develop SCM recommendations that will reduce costs and risks to the business operation. It is strongly recommended that you thoroughly review the prompt below before you read the case study, and you should continue to refer to the prompt as you read. You should format your analysis and recommendations as if you were a consultant hired by Walmart.



### Specifically, the following **critical elements** must be addressed:

- I. **Executive Summary**: In this section, explain the purpose of your brief and highlight key information and findings that will aid the understanding of the more in-depth analysis and recommendations to follow.
- II. **Demand Forecasting:** In this section, first assess the supply and demand side of Walmart's product flow, including the customer's needs and the supplier's capabilities, in order to then identify potential alignments that will keep cost and waste at a minimum.

#### A. Evaluation

- 1. Analyze Walmart's **suppliers** in terms of their abilities to meet the demand of customers during steady-state and peak operations. How effective are each supplier's inventory reorder points and economic order quantities? Support your analysis with quantitative examples.
- 2. Additionally, describe demand-forecasting **constraints** that exist within the supply chain. For example, consider the distance of the stores and the compatibility of the products in terms of shipping, storage, and so on.
- B. **Recommendations:** Based on your evaluation, recommend strategies for better aligning the supply and demand side of Walmart's product flow that will keep cost and waste at a minimum.
- III. **Sourcing:** In this section, first evaluate the network sourcing strategy of Walmart in order to then identify possible areas in need of improvement that will leave room for future expansion.
  - A. **Evaluation**: Assess the current network sourcing strategy and determine whether or not the number and quality of suppliers is the optimal mix for the operation. To what extent do the current suppliers meet steady-state and peak demand? Are they consistently providing products that meet or exceed Walmart's quality standards? Defend your assessment with examples.

#### B. Recommendations

- 1. Recommend a **strategy to optimize** the sourcing network that takes into account current operations and leaves room for future **expansion**. Be sure to consider any alternative sources of materials available to the organization in your response.
- 2. Recommend a standard procedure for **vetting suppliers** to ensure that they are compliant with the corporate social responsibility guidelines of Walmart.
- 3. Make sure that you have recommended the best sourcing practices for Walmart using appropriate **quantitative methods**.
- IV. **Transportation:** In this section, first consider the effectiveness of Walmart's transportation network in order to then determine possible cost savings without sacrificing performance.

#### A. Evaluation

- 1. Identify **constraints** within the transportation network and discuss the impact they will have on the overall supply chain operation. Be sure to provide specific examples to illustrate.
- 2. Analyze the transportation network and determine whether or not the correct **modes of transportation** are being used based on time, cost, and quantity.
- B. **Recommendations:** Make recommendations on how to improve the transportation network given the constraints you identified, using specific examples to illustrate and justify your claims.



V. **Warehousing**: In this section, first analyze Walmart's warehousing network to in order to then determine requirements and develop recommendations for adequately meeting current and future storage needs.

#### A. Evaluation

- 1. Analyze the current warehousing **infrastructure** to determine if the current warehousing network adequately meets storage needs. Additionally, consider eventual expansion requirements of Walmart's operation. What are the constraints or restrictions involved in the possible locations?
- 2. Identify considerations for special handling of **hazardous materials** and describe their impact on warehousing for the current mix of products that Walmart's SCM is handling, using specific examples.

#### **B.** Recommendations

- 1. Determine warehousing **requirements** that will ensure adequate availability of resources for the organization. Support your proposed requirements with given production and demand elements from the scenario.
- 2. Based on your determination of requirements, recommend a **warehouse design** that will minimize movements between functions and reduce costs. Explain how your recommendation will drive this improvement throughout the network, considering facility costs, inventory carrying costs, personnel costs, and equipment costs.
- VI. Conclusions: In the final section, take a critical look at your various recommendations in order to develop final conclusions for Walmart.
  - A. **Prioritize** your demand-forecasting, sourcing, transportation, and warehousing recommendations based on efficiency gain, cost, and sustainability.
  - B. Discuss the **feasibility** of your recommendations based on supply chain constraints of Walmart in the case study. Justify your claims with specific evidence.

## **Milestones**

Milestone One: Demand Forecasting and Sourcing

In **Module Three**, you will submit an assessment of the supply and demand of Walmart and product flow, as discussed in the Walmart China: Supply Chain Transportation case study. You will also evaluate the network sourcing strategy of Walmart to identify areas that may be in need of improvement and will leave room for future expansion. **This milestone will be graded with the Milestone One Rubric.** 

Milestone Two: Transportation and Warehousing

In **Module Five**, you will submit an evaluation of Walmart's transportation and warehousing networks, focusing on constraints, modes of transportation, infrastructure, and special handling requirements. You will also make recommendations to improve transportation. **This milestone will be graded with the Milestone Two Rubric.** 

**Final Submission: Supply Chain Evaluation** 

In **Module Seven**, you will submit your final project. It should be a complete, polished artifact containing **all** of the critical elements of the final product. It should reflect the incorporation of feedback gained throughout the course. **This submission will be graded with the Final Project Rubric.** 



## **Final Project Rubric**

**Guidelines for Submission:** Your supply chain evaluation should be 12–15 pages, double spaced, with one-inch margins, 12-point Times New Roman font, and APA citations when applicable.

Critical Elements	Exemplary (100%)	Proficient (85%)	Needs Improvement (55%)	Not Evident (0%)	Value
Executive Summary	Meets "Proficient" criteria, and the executive summary reflects	Explains the purpose of the brief and highlights key	Discusses the purpose of the brief or highlights certain	Does not include an executive summary	2
	a concise, effective	information that supports the	information, but there are gaps	Summary	
	communication style	analysis and recommendations	in necessary detail		
	communication style	of the brief	in necessary detail		
Demand Forecasting:	Meets "Proficient" criteria, and	Accurately analyzes suppliers'	Discusses the suppliers' abilities	Does not discuss the suppliers'	6
<b>Evaluation: Suppliers</b>	analysis reflects deep insight	abilities to meet customer	to meet various customer	abilities to meet various	
	into operational and logistical	demand during steady-state	demands, but there are gaps in	customer demands	
	issues related to supply chain	and peak operations using valid	necessary detail, accuracy, or		
	management	supporting quantitative evidence	the quantitative evidence		
Demand Forecasting:	Meets "Proficient" criteria, and	Describes all relevant demand	Discusses demand forecasting	Does not discuss demand	5
Evaluation:	description reflects a nuanced	forecasting constraints of the	constraints but fails to consider	forecasting constraints	
Constraints	understanding of constraints	supply chain using specific	all relevant constraints or cite		
	that impact problem solving in	details	specific details		
	supply chain management				
<b>Demand Forecasting:</b>	Meets "Proficient" criteria, and	Recommends appropriate	Discusses strategies for better	Does not discuss strategies for	5
Recommendations	recommendations reflect	strategies for better aligning	aligning the supply and demand	better aligning the supply and	
	advanced ability to strategically	the supply and demand sides of	sides but fails to recommend	demand sides of the product	
	reduce costs and mitigate risks	the product flow that would	fully appropriate strategies that	flow	
	in the supply chain	effectively keep cost and waste	would effectively keep cost and		
		at a minimum	waste at a minimum		
<b>Sourcing: Evaluation</b>	Meets "Proficient" criteria, and	Assesses the current network	Discusses the current network	Does not discuss the current	5
	assessment reflects a nuanced	strategy to determine how	strategy in terms of the supplier	network strategy	
	understanding of issues that	optimal the supplier mix is for	mix, but there are logical gaps		
	impact problem solving in	the operation, citing specific,	in the assessment, or the		
	supply chain management	supporting evidence	assessment is not sufficiently		
			supported with specific		
			evidence		



Sourcing: Recommendations: Strategy to Optimize	Meets "Proficient" criteria, and recommendations reflect a particularly shrewd or creative ability to apply supply chain principles to address network inefficiencies	Recommends an effective strategy for optimizing the sourcing network that takes into account current operations and leaves room for future expansion	Discusses a strategy for optimizing the sourcing network but fails to propose a fully effective strategy that takes into account current operations and potential future expansion	Does not discuss a strategy for optimizing the sourcing network	9
Sourcing: Recommendations: Vetting Suppliers	Meets "Proficient" criteria, and recommendations reflect advanced ability to strategically reduce costs and mitigate risks in the supply chain	Recommends an appropriate standard procedure for vetting suppliers that would reasonably ensure compliance with social responsibility guidelines	Discusses a standard procedure for vetting suppliers, but fails to propose a fully appropriate procedure that would reasonably ensure compliance with social responsibility guidelines	Does not discuss a standard procedure for vetting suppliers	5
Sourcing: Recommendations: Quantitative Methods	Meets "Proficient" criteria, and recommendations reflect advanced ability to apply quantitative methods to supply chain management issues	Presents sourcing recommendations based on and supported by appropriate quantitative methods	Presents sourcing recommendations that have some basis or support from quantitative methods, but there are gaps in the application or inappropriate methods are used	Does not present sourcing recommendations with a basis or support from quantitative methods	6
Transportation: Evaluation: Constraints	Meets "Proficient" criteria, and response reflects a nuanced understanding of constraints that impact problem solving in supply chain management	Identifies all relevant constraints within the transportation network and discusses their impact using specific examples	Discusses constraints within the transportation network but fails to address all relevant constraints or fully discuss their impact using specific examples	Does not identify constraints within the transportation network	5
Transportation: Evaluation: Modes of Transportation	Meets "Proficient" criteria, and claims reflects deep insight into operational and logistical issues related to supply chain management	Makes valid claims about the effectiveness of current modes of transportation based on an accurate analysis of time, cost, and quantity	Discusses the effectiveness of current modes of transportation, but not all claims are valid or based on an accurate analysis of time, cost, and quantity	Does not make claims about the effectiveness of current modes of transportation	6
Transportation: Recommendations	Meets "Proficient" criteria, and recommendations reflect advanced ability to strategically reduce costs and mitigate risks in the supply chain	Recommends sound improvements to the transportation network that address all of the concerns and constraints identified in the transportation evaluation using specific examples	Discusses improvements to the transportation network but fails to make fully sound recommendations that address all of the concerns and constraints using specific examples	Does not discuss improvements to the transportation network	5



Warehousing: Evaluation: Infrastructure	Meets "Proficient" criteria, and analysis reflects deep insight into operational and logistical issues related to supply chain management	Reasonably analyzes warehousing infrastructure to determine its adequacy for meeting current and potential future storage needs	Discusses warehousing infrastructure but fails to reasonably determine its adequacy for meeting all current and potential future storage needs	Does not discuss warehousing infrastructure	6
Warehousing: Evaluation: Hazardous Materials	Meets "Proficient" criteria, and response reflects a nuanced understanding of issues that impact problem-solving in supply chain management	Identifies all relevant considerations for special handling of hazardous materials and describes their impacts on warehousing using specific examples	Discusses considerations for special handling of hazardous materials but fails to identify all relevant considerations or to describe their impacts on warehousing using specific examples	Does not discuss considerations for special handling of hazardous materials	5
Warehousing: Recommendations: Requirements	Meets "Proficient" criteria, and proposal reflects a particularly shrewd or creative ability to apply supply chain principles to address network inefficiencies	Proposes valid warehousing requirements that ensure adequate availability of resources based on given production and demand information	Discusses warehousing requirements, but fails to propose fully valid requirements that would ensure adequate availability of resources based on production and demand information	Does not discuss warehousing requirements	9
Warehousing: Recommendations: Warehouse Design	Meets "Proficient" criteria, and recommendations reflect advanced ability to strategically reduce costs and mitigate risks in the supply chain	Recommends a warehouse design that minimizes movements between functions, reduces costs, considers all relevant constraints, and is justified with specific evidence	Discusses a warehouse design but fails to recommend and fully justify a design that would effectively minimize movements between functions and reduce costs while considering all relevant constraints	Does not discuss a warehouse design	5
Conclusions: Prioritize	Meets "Proficient" criteria, and prioritization reflects a deep understanding of key supply chain principles	Appropriately prioritizes all recommendations based on efficiency gains, cost, and sustainability	Discusses the relative merits of the recommendations but fails to logically prioritize each based on efficiency, gains, cost, and sustainability	Does not discuss the relative merits of the recommendations	9
Conclusions: Feasibility	Meets "Proficient" criteria, and response reflects a nuanced understanding of constraints that impact problem solving in supply chain management	Reasonably justifies all claims about the feasibility of each of the brief's recommendations based on the constraints of the supply chain	Discusses the feasibility of the brief's recommendations, but fails to justify all claims based on the constraints of the supply chain	Does not discuss the feasibility of the brief's recommendations	5



Articulation of	Submission is free of errors	Submission has no major errors	Submission has major errors	Submission has critical errors	2
Response	related to citations, grammar,	related to citations, grammar,	related to citations, grammar,	related to citations, grammar,	
	spelling, syntax, and	spelling, syntax, or organization	spelling, syntax, or organization	spelling, syntax, or organization	
	organization and is presented in		that negatively impact	that prevent understanding of	
	a professional and easy-to-read		readability and articulation of	ideas	
	format		main ideas		
				Total	100%